



# Comprehensive Master Plan

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MOCA

Minnesota  
Capitol Preservation Commission  
Mark Dayton  
Governor

*2011 Preliminary  
Comprehensive Master Plan  
January 2012  
Draft*



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## **The Minnesota State Capitol Building**

### Preliminary 20 Year Master Plan



Existing Minnesota State Capitol Building 2011

Designed by Cass Gilbert, Architect 1900 - 1905

## PRELIMINARY MASTER PLAN

1/10/2012

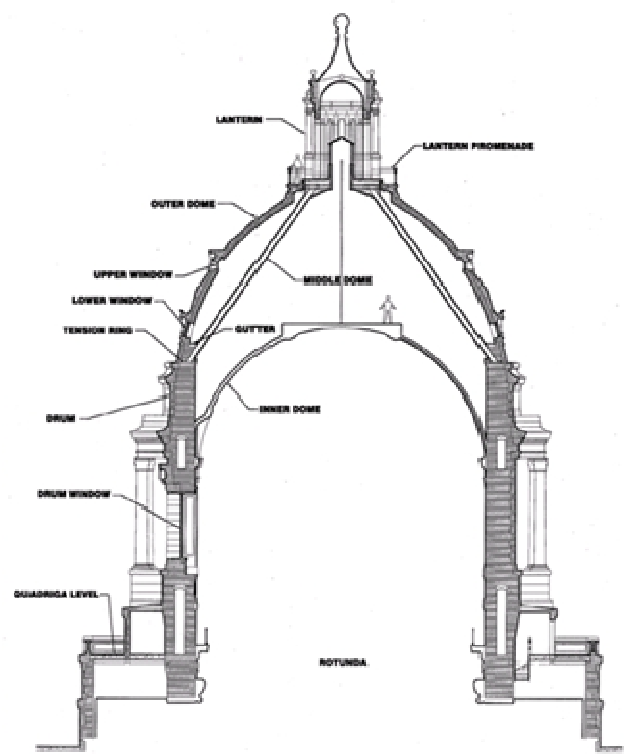
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MASTER PLAN

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PRELIMINARY MASTER PLAN

Capitol Master Plan Mission Statement

The Master Plan must emphasize the Architectural Integrity of the Cass Gilbert Capitol, functionally enhance the operations of the State Government and provide for Life Safety and Security of all for the next 100 years to ready it for use by future generations.

Capitol Master Plan Objective

The Minnesota State Capitol Master Plan document is a living document that provides a 20 year view of the restoration, preservation and maintenance of the Capitol. The Master Plan should be reviewed periodically and as appropriate, amended and modified to maintain the 20 year view.

The Capitol Preservation Commission is required, by statute, to develop a comprehensive, multiyear, predesign plan for the specific restoration of the Capitol building that is to conform and support the goals and objectives of the Capitol Master Plan.

This document provides the following goal, objective and actions that are needed to implement the desires of the Capitol Preservation Commission.

- The Master Plan must identify appropriate and required government and public functions of the Capitol building.
- The Master Plan must identify and address space requirements for legislative, executive, and judicial branch functions.
- The Master Plan must identify and address the long-term maintenance and preservation requirements of the Capitol building.
- The Master Plan must take into account the comprehensive plan for the Minnesota State Capitol Area, as amended in 2010.
- The Master Plan must take into account the rules governing zoning and design for the Capitol Area.
- The Master Plan must take into account citizen access.
- The Master Plan must take into account information technology needs.
- The Master Plan must take into account energy efficiency.
- The Master Plan must take into account security

- The Master Plan must take into account education programs including public and school tours
- The Master Plan must take into account any additional space needs for the efficient operation of state government.
- The master plan must be **flexible** to accommodate needs that will change as expressed by the board.

# CAPITOL PRESERVATION COMMISSION

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## Capitol Preservation Commission

The State Capitol Preservation Commission includes:

- Governor Mark Dayton
- Lieutenant Governor Yvonne Prettner Solon
- Attorney General Lori Swanson
- Chief Justice Lorie Skjerven Gilda
- Speaker Kurt Zellers
- Senator Carla Nelson
- Senator Ann Rest
- Senate Majority Leader David Senjem
- Senator Keith Langseth
- Representative Matt Dean
- Representative Mary Murphy
- Representative Larry Howes
- Representative Alice Hausman
- Commissioner Spencer Cronk Dept. Administration
- Commissioner Ramona Dohman Dept. Public Safety
- Historical Society Director and CEO D. Stephen Elliott
- Executive Secretary Nancy Stark,
- Ted Lentz—Public Member
- James Dayton—Public Member
- Dana Badgerow—Public Member
- Larry Gleason —Public Member

Members of the Capitol Preservation Commission participated in several meetings throughout the planning and development of this master plan. The Commission organized itself into subcommittee, to accomplish the work associated with the planning of the Capitol Restoration. These subcommittees worked to further the planning process.

### Preservation and Planning Subcommittee

The Preservation and Planning subcommittee met to review the history of the Capitol, it's uses, and the changes that have taken place over the past 100 years. The subcommittee developed and recommended to the commission the guiding principals that will be used in making future decisions. These guidelines include the following:

- **Architectural Integrity** implies that the restoration of the Capitol architecture is the most important aspect of the restoration. Not everything must be absolutely returned to the 1905 plan. The building must work for the next 100 years. When considering new space in the Capitol, it should be done with great care and respect to how Cass Gilbert would have done it in 1905. It is critical to preserve the integrity of the building and its great architecture.
- **Building Function** suggests that the building must work to improve and support the function of Government by solving some of the functional issues that currently exist. This, in turn, would also solve issues within State Government.

- **Life Safety and Security** provides the public and those who work and visit the Capitol a building that is safe from security threats and fire and should be accessible to all Minnesotans. It should be brought up to current life safety codes.

### Budget Subcommittee

The Budget Subcommittee reviewed the benchmarking analysis and other cost related data that was developed and presented their recommendations to the Commission.



# CAPITOL PRESERVATION COMMISSION

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## Commission Legislative Duty

*By January 15 of each year, the commission shall report to the chairs and ranking minority members of the legislative committees with jurisdiction over the commission regarding the activities and efforts of the commission in the preceding calendar year, including recommendations adopted by the commission, the comprehensive financial plan required under paragraph (a), clause (5), and any proposed draft legislation necessary to implement the recommendations of the commission.*

## Duties and Responsibilities

### **Specific Duties of the State Capitol Preservation Commission**

2011, 1st Special Session Chapter 6, Subd. 6

The commission shall develop a comprehensive, multiyear, pre-design plan for the restoration of the Capitol building, review the plan periodically, and, as appropriate, amend and modify the plan.

The pre-design plan shall:

- identify appropriate and required functions of the Capitol building;
- identify and address space requirements for legislative, executive, and judicial branch functions; and
- identify and address the long-term maintenance and preservation requirements of the Capitol building.

In developing the pre-design plan, the commission shall take into account:

- the comprehensive plan for the Minnesota State Capitol Area, as amended in 2010, ([www.caapb.state.mn.us](http://www.caapb.state.mn.us))
- the rules governing zoning and design for the Capitol Area,
- citizen access,
- information technology needs,
- energy efficiency,
- security, educational programs including public and school tours, and
- any additional space needs for the efficient operation of state government

The Commission shall develop and implement a comprehensive financial plan to fund the preservation and restoration of the Capitol building.

PRELIMINARY MASTER PLAN

# THE PLANNING PROCESS

## The Planning Process

The State Capitol Preservation Commission began the planning process in October of 2011. The Commission retained the Project Definition Team of MOCA to develop a comprehensive Master Plan and implementation strategy. The planning team reviewed historic reports and plans prepared by HGA Architects, reviewed the program requirements, and identified planning alternatives with the help of Mechanical engineers. The team focused on current and future needs associated with the systems, structure, and exterior and interior space needs associated with the Capitol proper. Traffic considerations, light rail and parking locations/ configurations were also considered, although they were not the focus of the study.

The State Capitol Preservation Commission worked through the established subcommittee utilizing a series of workshops facilitated by the Project Definition Team. Participant input was included in reports to the full commission documenting the workshops. The information developed in these workshops provided guidance to the commission by way of guiding principles and clarified the current and future needs of the Capitol. They also allowed for collaboration between different groups in order to further understand each other's needs.

Following these workshops, functional diagrams sessions were held with some of the members of the Commission. The resulting diagrams identified areas of need that required further analysis and study. The planning team studied the organizational structures of 13 renovated State Capitols in order to provide a starting point for a space planning organizational structure for the Minnesota State Capitol

The Capitol's mechanical, electrical and plumbing systems were analyzed to determine adequacy of each of

the systems. This analysis identified several options for improvement. The planning team was encouraged by the Commission to work within the framework and footprint of the Capitol, as well as to work with the original intention of Cass Gilbert. The mechanical and electrical systems were no exception.

The Commission provided suggested scenarios to assist with the development of space planning criteria. These 8 suggested scenarios then formulated the identification of the proposed approach.

### Schedule

Schedule development had to accommodate not only the project requirements but also be designed to provide flexibility for funding options and for keeping the building open to the public and elected officials to the greatest extent possible without incurring additional costs of construction.

### Budget

The budgeting process has focused on three basic cost elements. First, the hard costs associated with system replacement, including mechanical and electrical. Second, the decorative finish area or the historic specific finishes of the building. This would include historic lighting, decorative painting, wood window replacement, stone restoration and alike. And finally, the soft cost of furniture, fixtures, equipment, swing space and owner needs would be included as well.

## Acknowledgements

This document has been developed and organized with the assistance of:

- MOCA Systems - Program Manager
  - Commission Facilitator
  - Team Coordinator
  - Master Planning
  - Cost Estimating
  - Scheduling

- Wold Architects & Engineers

- Mechanical Concept
- Electrical Concept
- Space Planning
- Graphics



We would like to express our appreciation to the Department of Administrative who provided assistance and guidance throughout the planning process.

## PRELIMINARY MASTER PLAN

## HISTORIC BACKGROUND

### Background

The building was designed by Cass Gilbert. The building's dome was modeled, in part, after Saint Peter's Basilica in Rome - the unsupported marble dome is the second largest in the world, after Saint Peter's. However, like all Capitols with domes in the US, it's inspiration originated with the United States Capitol dome. Work began on the Capitol in 1896, and construction was completed in 1905. It is the third building to serve this purpose: the first capitol was destroyed by fire in 1881, and the second was completed in 1883, but was considered to be too small almost immediately.

Above the southern entrance to the building is a gilded quadriga called "The Progress of the State" which was sculpted by Daniel Chester French and Edward Clark Potter. It was completed and raised to the roof of the capitol in 1906. The four horses represent the power of nature: earth, wind, fire and water. The women riding in the back of the chariot symbolize civilization while the man standing at the front of the chariot represents prosperity.[2] In 1994 and 1995, the statues underwent a restoration procedure which included replacing the gold leaf on the figures. A sphere perched above the capitol dome also has similar treatment.

Gilbert's dome is smaller than Michelangelo's St. Peter's Dome. His drawings show that he originally planned a wider drum and, correspondingly, a more massive dome. The dome, as constructed, is a simplified design: single columns round the upper lantern. The ribs on the capitol dome are less pronounced than those on St. Peter's, but they are still visually apparent. Gilbert knew that St. Peter's dome was on the edge of being unstable: it had cracked and had to be reinforced. His engineer for this project, Gunvald Aus, bound the brick dome in reinforcing steel bands, and Gilbert crowned the paired columns round the drum (which act as buttresses to counter the dome's weight) with additional stone.

Other than St. Peter's, additional buildings with marble domes include the Taj Mahal in India, and the Rhode Island State House in the city of Providence.

Gilbert drew ire for choosing stone from Georgia rather than native Minnesota stone. A compromise was eventually made where the base of the building and interior spaces used varieties of native stone, including Kasota stone, and the rare Pipestone used by Native Americans for their peace pipes. Upon completion, the exterior and interior of the building drew praise, leading to requests for Gilbert to design Capitol buildings for other states such as West Virginia and Arkansas and other notable structures.

The Capitol cost US\$4.5 million at the beginning of the 20th century. It opened its doors to the public for the first time on January 2, 1905. A hundred years later, the building's estimated value was \$400 million.

Upon entering the building by the south door, one is below the central dome. A large star, symbolizing Minnesota's motto, "The Star of the North", is directly beneath the apex. Various portraits of state governors, and flags captured by Minnesota's regiments during the American Civil War are on display. Paintings showing some of the related battles can be seen in the governor's outer office. Much of the building is open to the public, although one interesting sight is only rarely accessible. This is the cloak room behind the House of Representatives chamber. The walls are painted to simulate a north woods forest, but in one corner is a tiny four leaf clover. This was added by an Irish artist to remember his home island.

The structure was added to the National Register of Historic Places in 1972.

*History adapted from Wikipedia Dec. 29, 2011*



Cass Gilbert standing on the partially constructed state capitol building in Saint Paul, May 9, 1901.



## PRELIMINARY MASTER PLAN



Relocations

Minnesota State Capitol  
Timeline of Capitol Space Occupancy

*The information in this section has been provided by the Minnesota Historical Society.*

This document provides a summary of changes in the occupancy of space within the Capitol building. It should be considered a “work in progress” - as additional information becomes available to fill in gaps, that information can be added to the chronology. Also, this timeline is not a complete history of every state agency or commission that has moved since 1905. Rather, it captures the significant changes that have occurred and has led to the present day use of spaces within the Minnesota State Capitol.

In the history of the present day Capitol building, the most consistent driver of change in moving and relocating different agencies, commissions, executive offices, the judiciary, and the legislature, was the need for more space.

The construction of the Minnesota Historical Society Building in 1918 (690 Cedar St.) and the State Office Building in 1932 helped alleviate some of those space constraints, but as soon as an office or room was vacated in the State Capitol it was quickly filled by another state government entity.

Additional buildings were added to the Capitol Complex in the 1950s and 1960s. This period of relocation from the Capitol of other state agencies and commissions, and for the first time executive officers, began a transition of making the Capitol less an administrative headquarters and more a center of activity related to the legislative process, including the legislative and executive branches. That trend continued through the 1970s until

the 1990s as the original 1905 office spaces were converted to committee hearing rooms and spaces for legislators and their support staff.

Timeline of Capitol Tenant Occupancy and Moves

**1905** – All Executive officers and a variety of commissions and boards occupy the building. Each of the five Supreme Court justices has an office on the southeast 2nd floor. Senate and House members use their desks in chambers as office space. Other entities housed in the Capitol include:

Ground Floor:

- Board of Health
- Dairy and Food Commissioner
- Labor Commissioner
- Livestock Sanitation Board
- Minnesota Historical Society
- Board of Control
- State Public Library Commission
- Sec. of the Soldier’s Home

First Floor:

- State Auditor (Room 123)
- State Treasurer (Room 125)
- Secretary of State (Room 128)
- Governor’s Office (Room 130)
- Attorney General (Room 102)
- Adjutant General
- Railroad Commissioner
- Insurance Commissioner
- Public Examiner

Second Floor:

- Supreme Court
- Law Library
- House of Representatives
- Senate
- Committee Rooms

Third Floor:

- Superintendent of Public Instruction
- Game & Fish Commissioner
- Boiler Inspector
- Oil Inspector
- Law Library
- Forestry Board
- Committee Rooms

**1918** – Minnesota Historical Society moves out of E. Ground Floor to new building at 690 Cedar St. The Education Department is temporarily located in this same building.

**1918-1919** – The Supreme Court expects to use the space vacated by MHS, but for unknown reasons at this time, other commissions and agencies move into those ground floor spaces.

**1932** – State Office Building opens and a large number of commissions and agencies vacate the Capitol or move from the Old Capitol to this new building. The basement floor of the Capitol is lowered several feet to accommodate pedestrian traffic coming to and from the State Office Building tunnel and allow for the creation of office spaces.

**1930s-1958** – Dept. of Transportation Motor Vehicles License Bureau is located on W. Ground Floor corridor and in Room 15 until it moves into the new Highway Department Building (DOT).

**1938** – House of Representatives chamber north public gallery seating removed and converted into two floors of office space.

## HISTORIC BACKGROUND

**1956** – Highway Dept. Building built (Dept. of Transportation).

**1958** – Centennial Building opened for occupancy.

**1967-1968** – Administration Building is completed.

Executive Offices (State Treasurer, State Auditor) and Department of Administration move from the Capitol to the Administration Building. The Secretary of State’s Office moves to the State Office Building the same year.

The Governor’s Office absorbs the former Sec. of State office space (SW offices-1st Floor).

The Lt. Governor takes over the State Auditor’s office space (Room 105).

A joint Senate-House Rules committee approves giving the 1st Floor East Wing over as offices and committee rooms for the Senate (Rm. 120) and House (Rm. 123 & 125) committees.

**1968** – Governor Harold LeVander suggests and is met with resistance to partition off the Governor’s Reception Room for additional office space.

**1969-1970** – Capitol undergoes significant changes by remodeling and converting former commission and agency office spaces into committee hearing rooms.

Room 15, 112 and 118 are remodeled and become shared legislative committee rooms. Additional committee rooms are created for the House on the Ground floor and for the Senate on W. 2nd and 3rd Floors.

Rooms 107, 123 & 125 are remodeled as House Hearing Rooms.

Temporary offices (the addition of plywood and plaster

walls) are constructed in the E. and N. Ground Floor corridors and allow each House member an office space in the Capitol.

Senate Minority members are housed in a plywood enclosure in the 2nd Floor Rotunda, S. Corridor (built around and in front of the south French doors).

**1971-73** –1st Floor W. Wing (Governor’s office, 1st and A.G.’s offices) are remodeled.

Revisor of Statutes Office is located on the Ground Floor and Basement. Rooms are provided for the media in the Basement.

**1972** – Passage of the Flexible Session Amendment (which allows the legislature to set their regular session dates) begins the process of expanding legislative needs and requires finding more office spaces and support staff.

Partitions removed from 2nd Floor Rotunda, S. Corridor.

**1975** – House members and Senate minority members relocate to the State Office Building.

Each Senate majority member, after space is remodeled, is provided a private office in the Capitol.

**1975-76** – Lt. Governor’s Office moves to Room 122.

**1984** – State Office Building is remodeled (which includes new committee rooms for the House of Representatives).

The addition of hearing rooms in the State Office Building leads to House committee rooms (including 123 & 125) being turned over to the Senate to use as office and committee rooms.

Revisor of Statutes Office moves from the Ground and Basement floors to the State Office Building.

**1990** – Lt. Governor’s Office is incorporated into the Governor’s office suites on W. 1st Floor.

**1991** – Supreme Court leaves the Capitol and moves to Judicial Center.

House, Senate and Governor’s Office take over the vacated Supreme Court spaces on the second and third floor.

**1995** – After several years of discussion between the House and Governor’s Office about space usage on the second floor (formerly Supreme Court space), and a court order to settle the dispute, an agreement between the House, Senate and Governor’s Office is reached that allows:

- the governor to get office space on the W. Ground Floor occupied by senators at that time.
- the Senate receives House and Governor Office space on the 2nd Floor, S.E. Wing.
- the House retains the contested space and gets legislative funding to remodel others spaces it controls in the Capitol.

## PRELIMINARY MASTER PLAN



## HISTORIC BACKGROUND

### Significant Relocations from Capitol

In reviewing the timeline showing some of the significant movements of Capitol occupants over time, it is clear the changes occurred due to crowding and space issues. The most logical means to attain relief in overcrowding was to build new buildings or update them, including the Capitol, as needed to accommodate the expansion of government. These buildings include:

- The Minnesota Historical Society's move out of the Capitol in 1918.
- The State Office Building opening in 1932.
- The Administration Building opening in 1967.
- The State Office Building remodeled in 1984.
- The Supreme Court moving out of the Capitol in 1991

With each successive move, the trend was to remove the state's administrative and service agencies and provide more room and spaces for legislative services and operation.



## PRELIMINARY MASTER PLAN



# CAPITOL CAMPUS IN 2011

## The Capitol Campus in 2011

### Background

After Cass Gilbert won the architectural competition in late October, 1895, he made a plea to the board to change the Capitol site in order to achieve a Capitol approach symmetrical to the layout of the streets. This plan was outlined by Saint Paul architect Thomas Holyoke who worked with Gilbert on the Capitol drawings. Holyoke wrote Gilbert from Saint Paul on November 5, 1895:

"Enclosed please find plat of the Capitol site enlarged by including blocks 3 and 4, so that it might be possible to center the dome on the axis of University Avenue as we talked of during work on the competition drawings. This scheme according to the city atlas in your office, from which the tracing is made, would give an unobstructed view of the dome from a point in [on?] Hamline or a distance of 3 • miles in riding into the city from Minneapolis. Brewster Avenue on the other axis is in line with a street running to the bluff in West St. Paul. It seems to me something that the commissioners might consider if you were to recall to their minds the fine effects that have been attained in Washington and Paris by similar means."(13)

### Gilbert's 1902 Plan

In 1902, recognizing that the state might not be forthcoming, Gilbert began working on the city and civic groups to raise funds for the development of the Capitol approach. He drew a plan and presented it in a lecture before the Woman's Civic League and Saint Paul businessmen at the Commercial Club on November 13, 1902. He outlined a mall stretching between Wabasha and Cedar to the

site of a new Saint Paul Public Library just in front of the old Capitol at Tenth Street. Two suggested buildings occupied sites immediately kitty-corner to the library on it's north side and opposite each other on the mall. The mall contained a large pool.

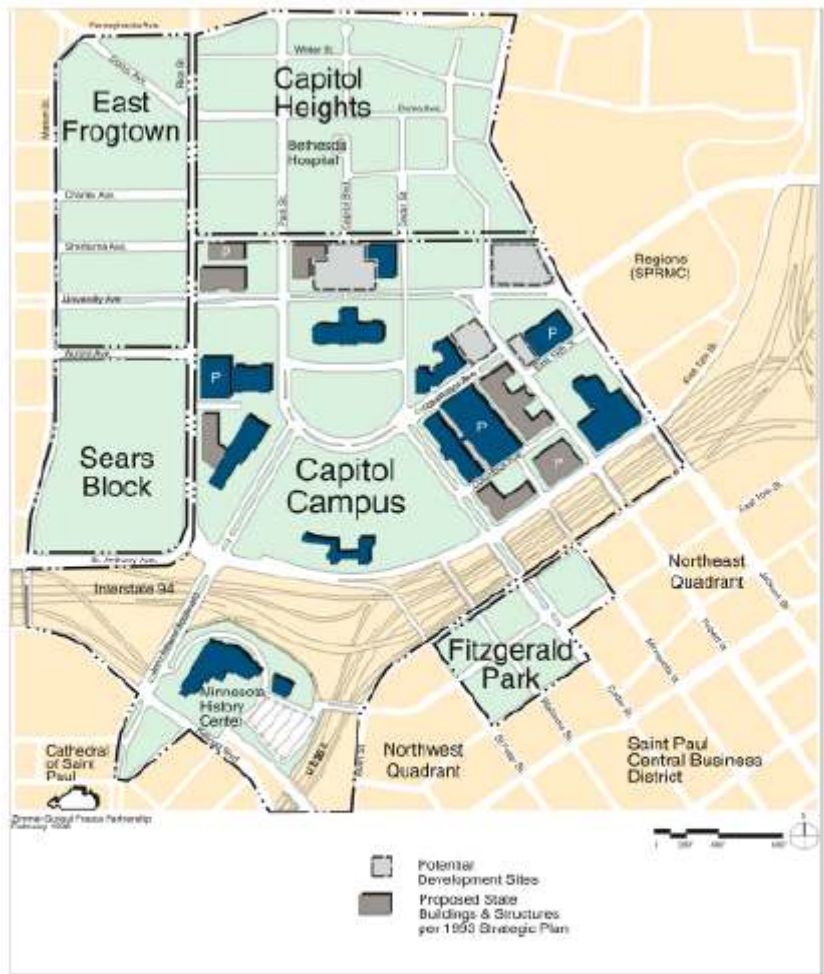


The earliest approach plan yet found. Attributed to Gilbert and drawn in 1902, it contains buildings on the future sites of the Historical Society and State Office Building, the approach from a veterans war memorial and a Cedar Street mall terminating at a library in front of the previous Capitol.

An approach directly south of the Capitol began at the block bounded by Summit, College, Rice, and St. Peter, well short of an approach to Seven Corners, which would occupy his later plans. The symmetrical curve of Central Avenue at the Capitol's front appeared at this time. Two suggested buildings occupied the sites of the present Historical Society and State Office Building. Another two buildings, similar in size to one another, sat on two adjacent sites north of the Capitol, one on the site of the forty-foot hill, the other on the Merriam Mansion site. The plan did not address an axis to the cathedral; the Catholic church would not purchase that site for another two years.

### Credits

The above is an excerpt from the History of the Minnesota State Capitol Area by Gary Phelps for the CAAPB.



This plan shows potential development sites on the Capitol Campus. The east campus has much development potential.

## PRELIMINARY MASTER PLAN

SECTION ONE:  
1985 TO 2011 IMPROVEMENT PROJECTS

Capitol Appropriations

Project Types	
<ul style="list-style-type: none"><li>• Selective Remodeling</li><li>• Exterior Maintenance and Repairs</li><li>• Selective Life-safety, ADA and Security Work</li><li>• Structural Repairs (Exterior, Basement, SE &amp; SW Terraces)</li><li>• Elevator equipment</li><li>• Paint and plaster repairs</li><li>• Pre-design and design work for restoration of Capitol Building Interior</li></ul>	
Total Amount: \$69,167,000	

Funding from 1985 to 1989

Year	Amount	Purpose
1985	\$1,790,000	General Renovation
	\$ 250,000	Clean, tuck-pointing. (Exterior)
	\$ 582,000	Dome and Lantern. (Exterior)
1987	\$1,500,000	Exterior (rehab. Phase III-MD). (Exterior)
	\$4,800,000	Senate Chamber
1988	\$ 350,000	Space planning
	\$ 220,000	Dome (Exterior)
1989	\$3,000,000	Senate remodel-north corridor; HR 107 & 112
	\$ 575,000	Ph. III & IV (MD general plan) (Exterior)
	\$2,200,000	House Chamber

Funding from 1990 to 1999

Year	Amount	Purpose
1990	\$ 300,000	Remodel in east wing (Per House & Senate)
1992	\$1,645,000	Fire mgmt system; investigation and testing of roof and Quadriga
1994	\$ 400,000	Campus security lighting.
	\$5,000,000	Roofs (Exterior), Quadriga restoration
	\$ 65,000	Exterior maintenance manual
1995	\$1,715,000	Renovation/Predesign
1996	\$7,400,000	NE & NW Terraces (\$4.8), lantern (\$1.4), cafeteria (\$1.2), structural stabilization. (Exterior & Bsmt.)
	\$1,500,000	Elevators' equipment. (Admin)
1997	\$1,035,000	Add to Café in Subd. 4 of '96, and Subd. 2 of '94.
1998	\$6,600,000	Structural stabilization. (Exterior & Bsmt.) SE & SW Terraces
	\$1,500,000	Accessibility (doors & hardware). (Admin)
1999	\$ 520,000	Security upgrades. (Admin)

Recent Asset Preservation Appropriations

Amount	
Laws of 2006	
Ch. 258, Sec. 12, Subd. 3	\$ 1,084,000
Ch. 258, Sec. 13	\$ 1,466,000
Laws of 2008	
Ch. 179, Sec. 12, Subd. 3	\$13,400,000
Laws of 2011	
1st Special Session, Ch. 12, Sec. 9, Subd. 3	\$ 4,000,000
Total:	\$19,950,000

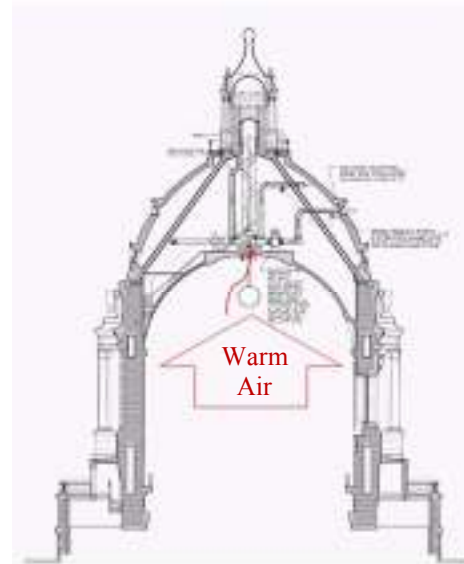


# SECTION ONE: 1985 TO 2011 IMPROVEMENT PROJECTS

## Current Asset Preservation Projects

### Current Work — Phase

- **Dome**
  - Finial Repair & Re-gilding - Construction
  - Replace 12 Large Drum Windows - Design
- **Exterior**
  - Comprehensive Ext. Stone Assessment - Investigation
  - Main Roof Replacement - Investigation/Design
  - West Plaza and Stair Repair - Design
- **Internal**
  - Replace Hot Water Heating System - Construction
  - Storm Sewer/Sanitary Sewer Separation - Design/Construction
  - Senate Media HVAC Upgrade B29/B32 - Construction



PRELIMINARY MASTER PLAN



# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

## Activities

### General Activities

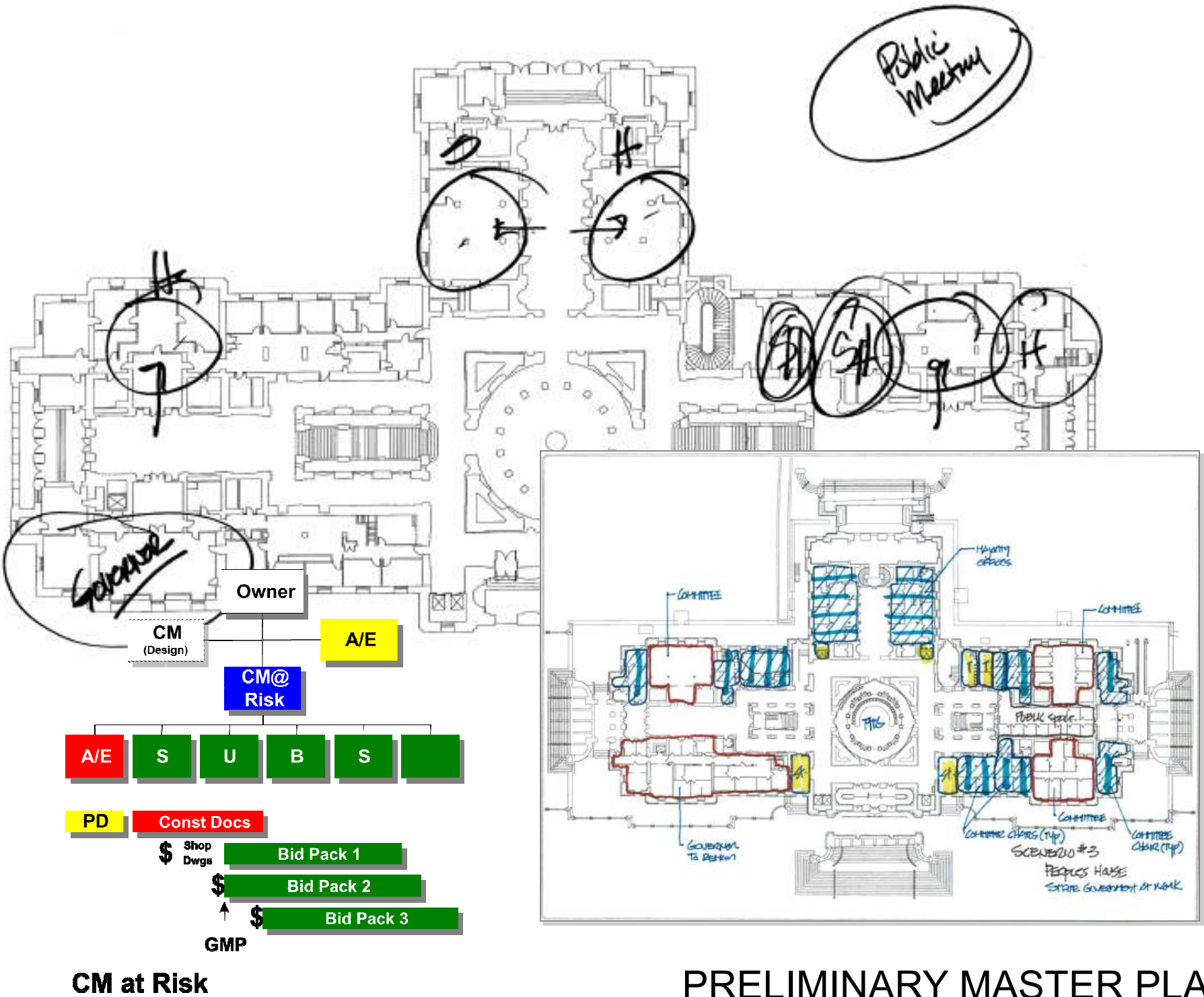
- Complete the Comprehensive Master Plan and develop an overall set of Design Guidelines and Imperative Documents for the Project.
- Complete the Pre-Design Documents per State guidelines
- Develop a Collaborative Management, Design, and Construction team that will work collaboratively and deliver the restoration of the Capitol to the State of Minnesota.

### Pre-Design Activities

- Retain a project manager and project definition team for the overall project management, master planning, and design guideline documentation for the entire project to represent the State (March 2012).
- Retain the architect, engineers and a construction manager for the entire project. Select the team through an integrated approach for the design and construction of the Capitol Restoration and the Swing Space (May 2012)

### Pre-Construction Activities

- Provide Selective Demolition to Assist the Design team in understanding the composition of the Building (Ongoing)
- Investigate the attic space and assist the design of the new Concrete Mechanical Slabs in the Attic of the Capitol. (July 2012)
- Prepare budget estimates and schedule for the sequences of the work according to the master plan (July 2012)
- Identify staging and laydown area for the attic mechanical work. (August 2011)



PRELIMINARY MASTER PLAN

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

## Space Planning Concepts

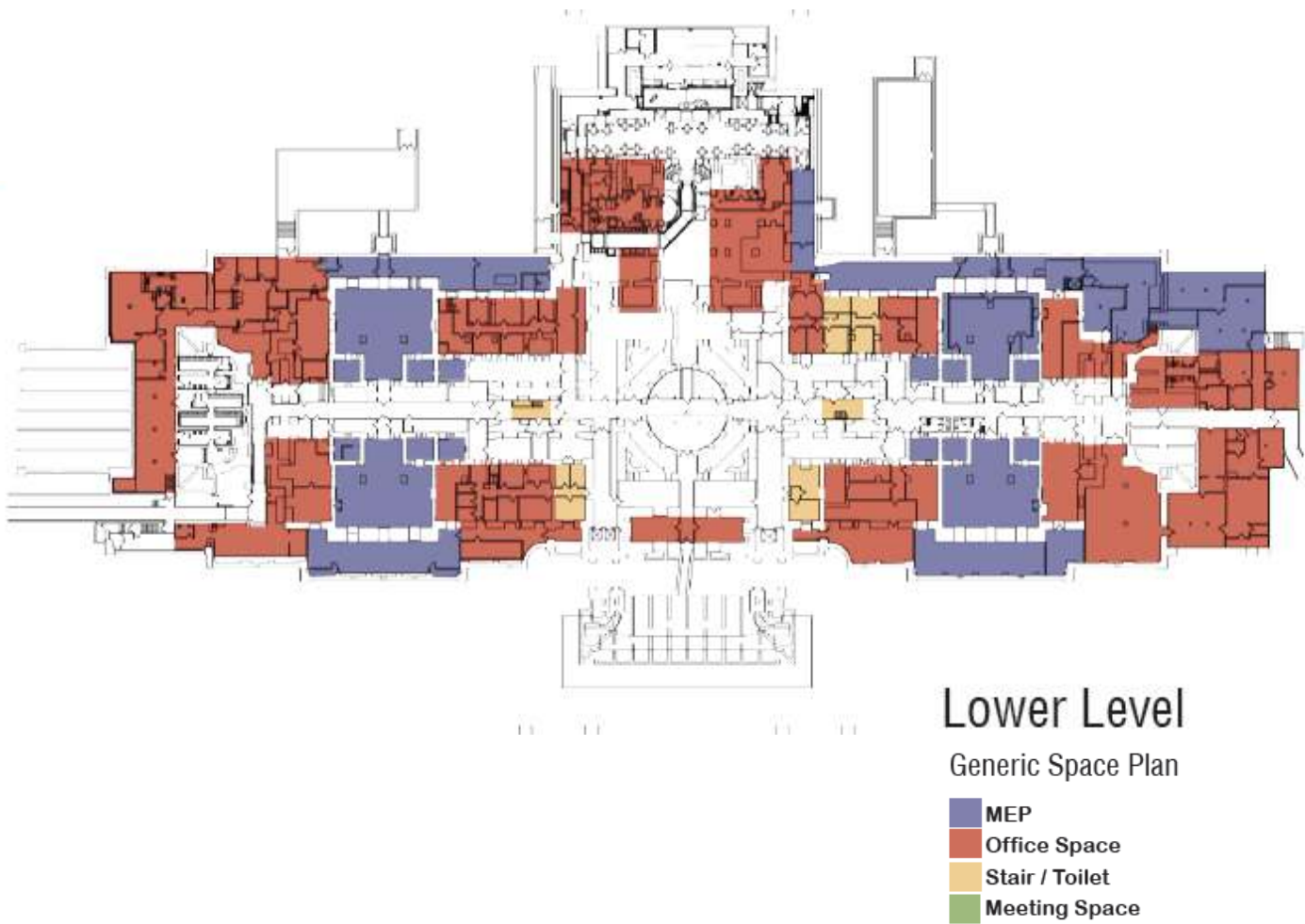
Fiscal Years 2012-2014

### General Concept

- The restoration of the Minnesota State Capitol is organized to maintain the Architectural Integrity of Cass Gilberts original design, to improve the function of government, and to improve access that the public has to the government and to provide for life safety and security as described in the introduction to the master plan.
- It is critical to the working of Government that the Executive, Legislative and Judicial branches of government be able to continue working in the Capitol during the majority of the Capitol Restoration. Sequencing of the construction work is critical to the project.
- Space organization and programing will need to accommodate three critical elements: Mechanical and Electrical needs of the people and the building, Meeting space that is accommodating to the general public and provides for more public interaction with Government, and the determination and organization of the office space for each of the three branches of government that will occupy the building.
- The 1905 Capitol was not originally designed By Cass Gilbert to provide for modern day Life-Safety, ADA or Security needs. These critical elements must be accommodated and incorporated into the space planning and organizational layouts of the Capitol. These requirements may impact both the functional and structural elements of the building
- The space planning process will be largely driven by the Capitol Preservation Commission. They will work closely with the OPM and the AEC team to decide who will occupy what space within the Capitol. These discussions will need to take place early in the process and will need to allow for concerns and issues on all sides to be heard and understood prior to making a

final decision. It is anticipated that this will occur from 2012 to 2014 with the decision to be made prior to the legislative session of 2014.

- Construction of Mechanical, Electrical, and Plumbing may proceed during the development and analysis of the functional space plan.



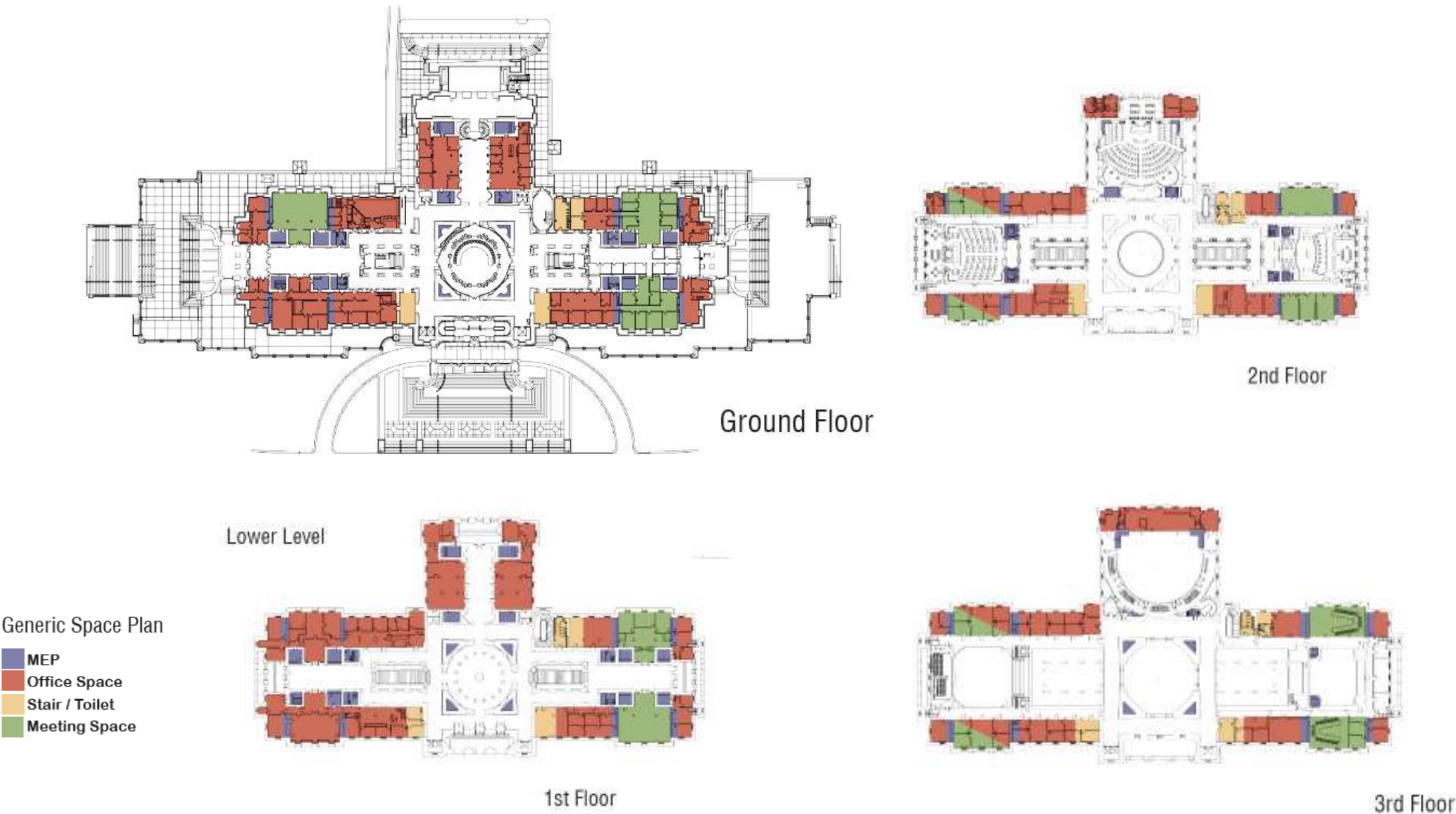
## PRELIMINARY MASTER PLAN



# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

## Space Planning Concepts

Fiscal Years 2012-2014



PRELIMINARY MASTER PLAN



# SECTION TWO: PLANNING & DESIGN

## OF THE CAPITOL RENOVATION

### MEP Space Planning Concepts

Fiscal Years 2012-2014

#### Existing Conditions

- Maintained and Well Managed:
  - Cass Gilbert’s ventilation systems were open windows and natural ventilation – impractical today.
  - Retrofitted systems do not ventilate all areas of the building – not code compliant.
  - Recirculation of interior air only, creating an unhealthy environment.
  - Leaking Pipes are a risk to further damage the building.
  - Aged systems - higher costs for maintenance and energy use.
- Ventilation Systems – The building has been retrofitted over the years to where today it has 32 air handling units. These units are primarily located in the basement. Two units have been installed on the roof to serve the House and Supreme Court assembly areas. The systems serving the rotunda and the grand stairs areas do not have a direct source of outside air ventilation and originally relied on natural air flow through the building.
- Plumbing Systems – The current systems are original in many areas and have reached their expected life.
- Water distribution - was upgraded in 1984, however, the system pipe materials include copper and galvanized steel. Over the years, dissimilar materials have created corroding and leaking of joints.
- Hot Water - heated from district energy to temperatures of 110 Deg. F for general use and 140 Deg. F for the kitchen. A booster is used for the dishwasher to reach 180 Deg. F.
- Storm, waste and vent piping - uses a combination of materials. Leaks in accessible locations have been

repaired as needed.

- Building Controls – have been updated over time for direct digital control of most of the central systems. Pneumatic systems remain at terminal devices.
- Fire Protection – Approximately 1/3 of the building total floor area has been retrofitted with a fire protection system.
- Communication/Data – The communication and data systems currently operate “as needed”. This needs to be reworked to provide more efficient distribution of service. Wireless systems also need to be configured.
- Electrical Service - Current service in to the building is 208 volt. The building is set for 13.8 KV, with the utility vaults outside of the Capitol. Transition to 480 volt should be relatively straight forward.
- District Energy Service – the building heating and cooling is provided by St. Paul District Energy. Service piping enters the building in the northwest corner of the building. Currently, there is a project underway to improve the hot water service entrance and distribution piping.

#### MEP Challenge

***Effective preservation planning requires a strategy of renovation to integrate engineered systems to provide a modern standard of function with minimal modification to the historic fabric.***

#### Recommended System

De-coupled Cooling Systems – new, more efficient approach delivers a high concentration of fresh air for ventilation. Less air is circulated requiring smaller equipment and ductwork. Devices located in each room provide temperature control.

#### Advantages

- Smaller equipment and ductwork easier to inte-

grate into design

- All new systems work within the building footprint
- Central unit heat recovery/better energy performer
- Most outside air intakes located on the roof
- Smaller outside air connections
- Cleans up roof of existing mechanical equipment

#### Challenges

- Integration of chilled beams into ceiling or wall design
- Integration of the exterior duct enclosures
- Integrating horizontal/vertical distribution into the building
- Smoke Management Systems approach

#### Planning Recommendations

1. The systems should be removed and replaced to provide a modern standard of function and to make ready for the next 100 years.
2. Building controls and a complete Fire Protection plan should be part of the restoration.
3. Building communication/data systems need to be upgraded. The electrical service can be reused. However, the distribution wiring and panels should be replaced to provide a modern standard of function.
4. The district energy services are in good condition and can be re-used to the greatest extent possible.

## PRELIMINARY MASTER PLAN

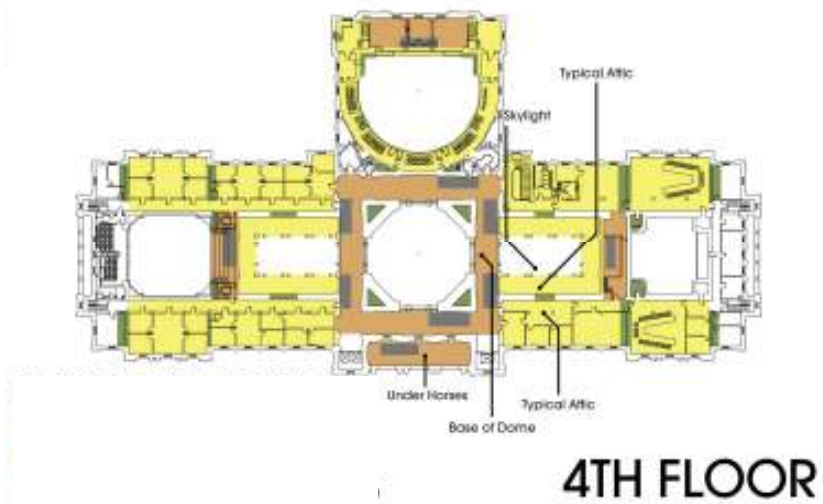
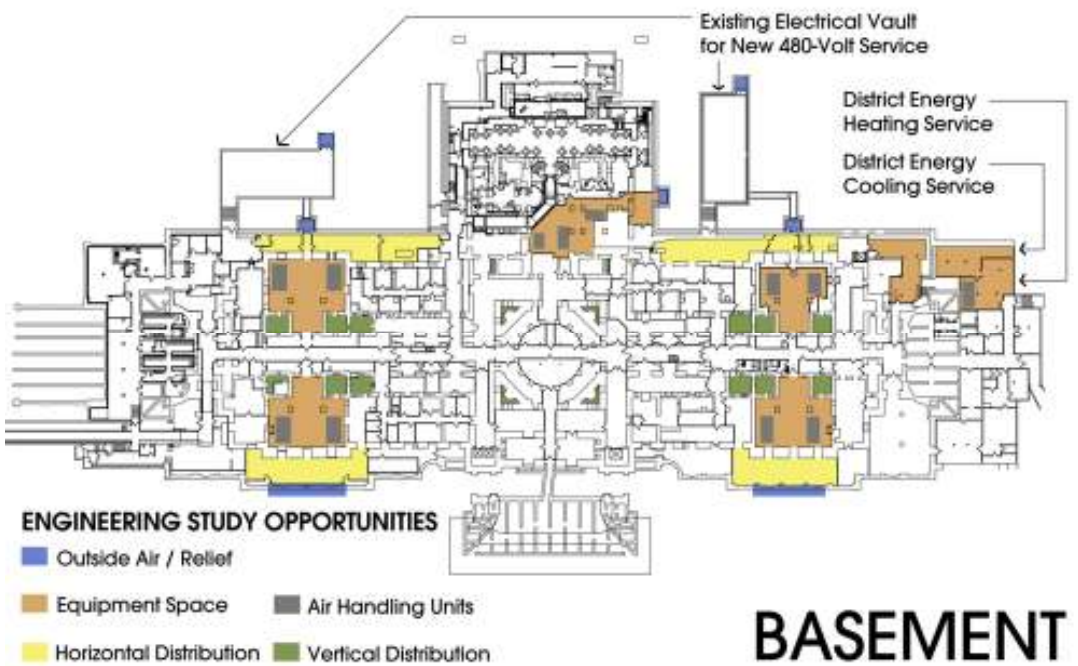
# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

## MEP Space Planning Concepts

Fiscal Years 2012-2014

### MEP General Concept

- The restoration of the Minnesota State Capitol is largely about the upgrading and improving of the mechanical and electrical systems in the building.
- The Impact that the vertical and horizontal equipment and duct work runs will have on the existing historic fabric must be carefully knitted through the building in order to maintain the architectural integrity of the building.
- The plan has been developed using as much of the Cass Gilbert original designed mechanical and electrical duct shafts as possible and only making them larger as needed to accommodate modern air flow and electrical demands.
- The primary equipment rooms in the basement and the horizontal distribution areas need to be carefully studied.
- The vertical shafts designed by Cass Gilbert will be enhanced to frame the public meeting spaces as they ascend the four floors of the Capitol.
- The fourth floor or Attic Space will house the Mechanical equipment and will provide for the horizontal distribution to the Chambers and the other related spaces. This equipment will reside in the areas originally provided by Cass Gilbert.
- At the roof level, accommodations will need to be made to allow for air intake devices and equipment. The design of these elements will need to mesh with the architecture of the building and will not be allowed to compete or detract from the quality of the workmanship of the building. Likewise, all exterior duct runs will be enclosed in structures that are sympathetic to the architecture and will be designed of like materials to support the architectural integrity of the

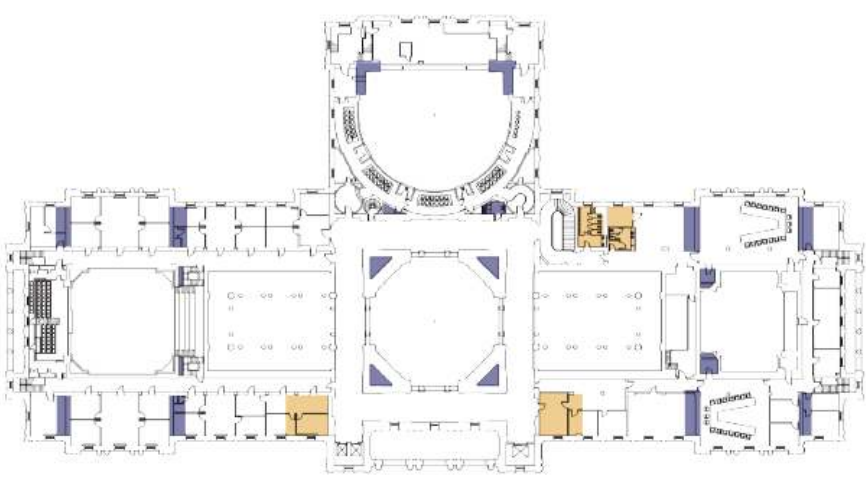
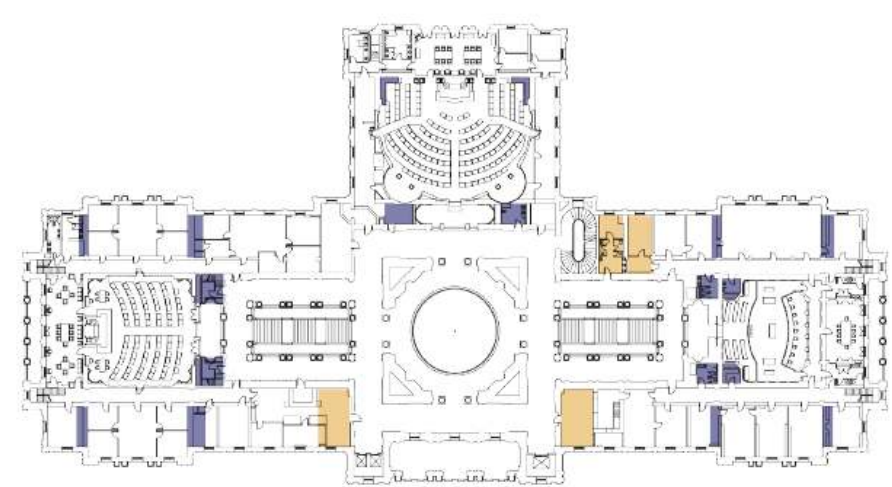
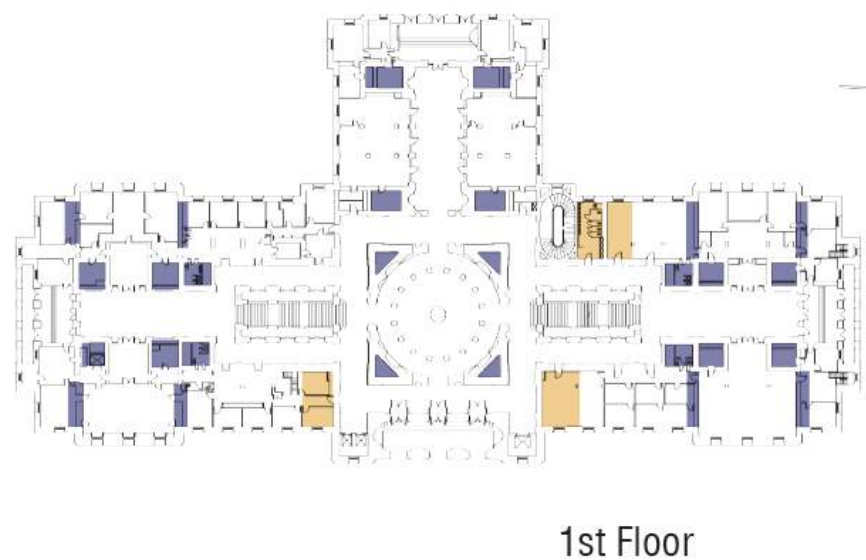
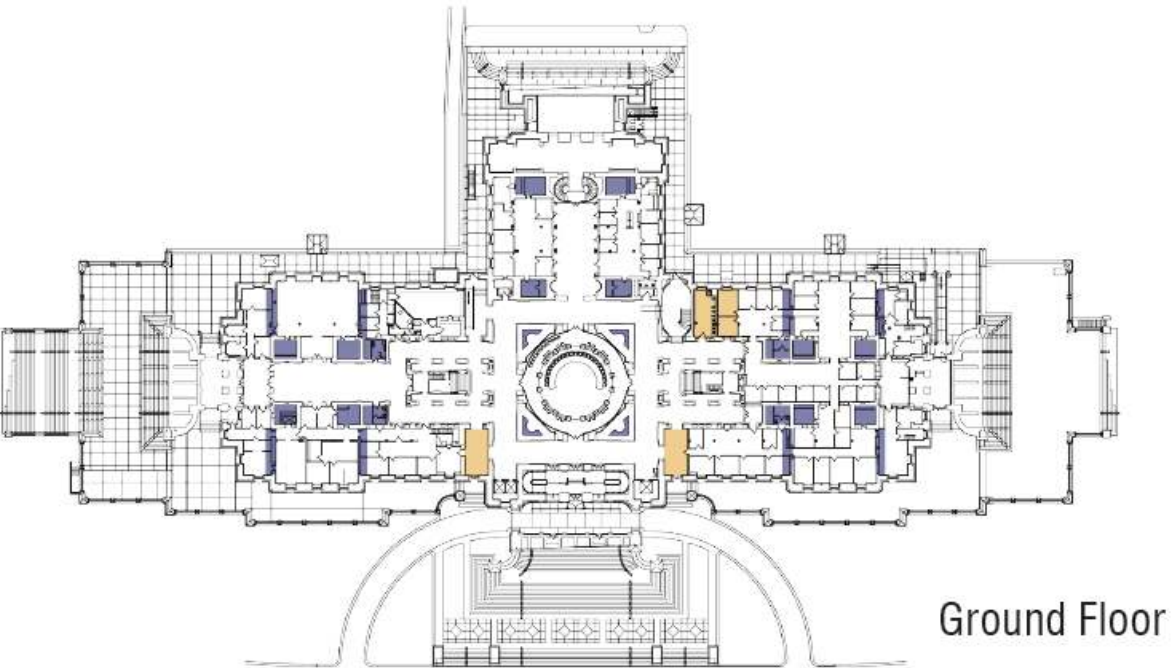
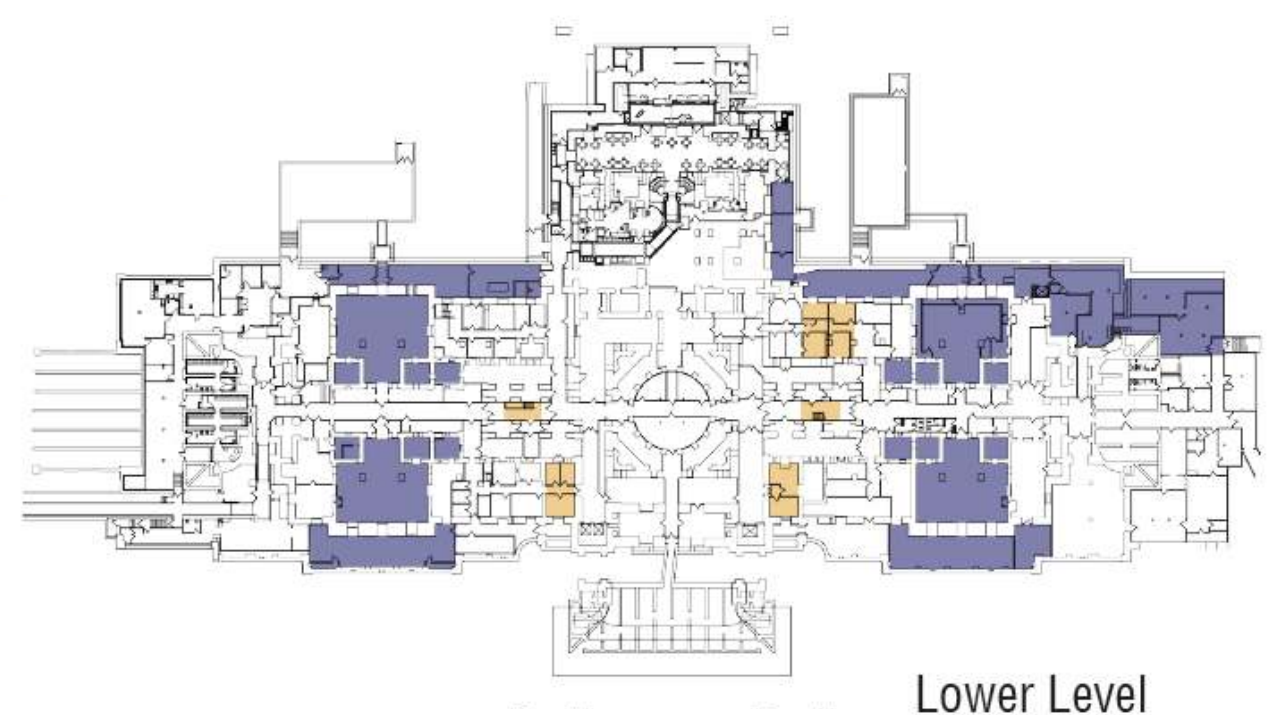


## PRELIMINARY MASTER PLAN

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

## MEP Space Planning Concepts



Generic Space Plan

- MEP
- Office Space
- Stair / Toilet
- Meeting Space

## PRELIMINARY MASTER PLAN



# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

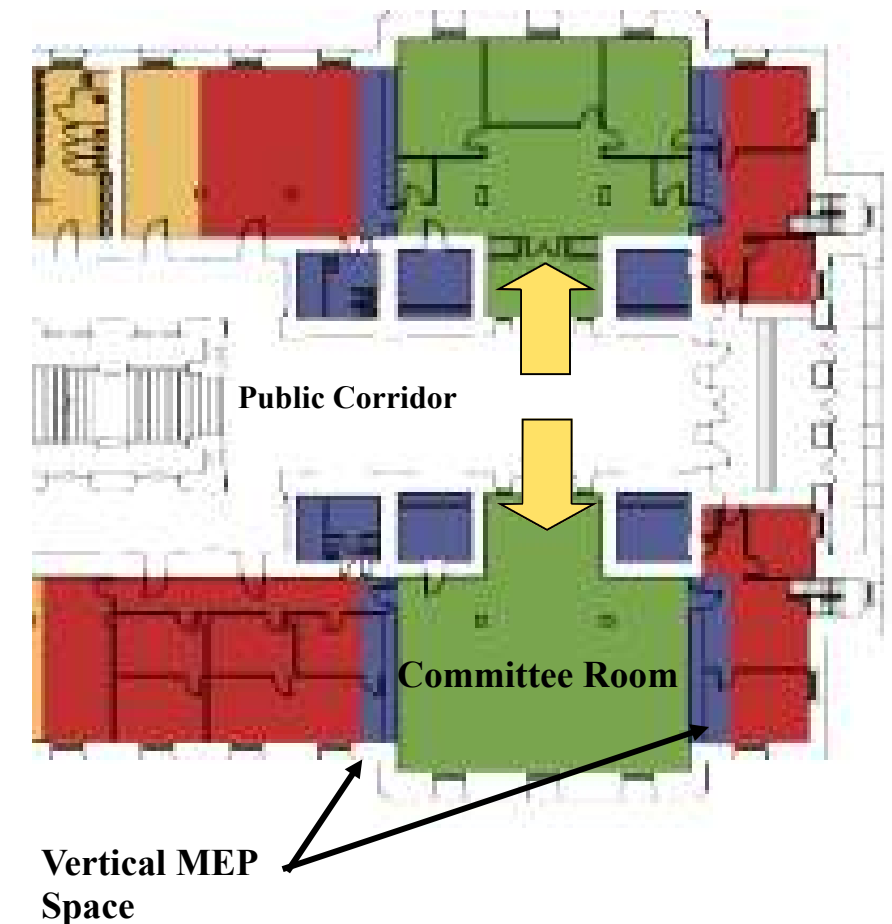
## Committee Room & Meeting Rooms Space Planning Concepts

### General Concept

- The Minnesota State Capitol is the “Peoples House”. As such, it needs to provide greater access to the government. The public’s ability to attend and participate in committee meetings and other legislative and executive meetings is critical to an open and transparent government.
- The current meeting rooms are small and do not provide a clear view of the proceedings due to obstructions such as columns within the room. Efforts should be made to limit or select spaces that provide an unobstructed view of the proceedings.
- There are several types of meeting spaces that need to be accommodated in the Capitol:
  - Committee Room - these spaces need to provide for legislators to gather around a Dias to discuss the people’s business. The audience needs to be able to participate in those meetings and hearings. These should accommodate as many members of the public as possible given the limitation of space due to the design of the building.
  - Caucus Rooms - these rooms need to be available to the Senate and House Majority and Minority members for meetings. Typically, members of the majority or minority will caucus together prior to voting on an issue or to discuss weighty issues. These rooms need to be in close proximity to the Chambers.
  - Conference Committee Rooms - these are basically large conference rooms where several member from the House and the Senate can gather to discuss the issues pertaining to a bill so that both bodies can come to an agreement on bills passed by the opposing body.

### Recommended Approach

- The design provided by Cass Gilbert provided for large unobstructed spaces in each of the four quadrants of the Capitol. These spaces, given the design of the building, are ideal spaces for Committee Rooms, Caucus Room and Conference Committee Rooms to be located in.
- They are framed vertically by the mechanical systems which separate them from the surrounding work and public areas.
- They are oriented with a major entry door way that leads into the Public Hall way on the Ground and First floors of the building, making them ideal for Committee Rooms.
- The spaces on the second and third floors are in close proximity to the Chamber of the Senate and House and would make excellent Caucus and Conference Committee Rooms.
- While they have two free standing columns in each of the spaces, the columns are located towards the back of the room providing both Dias and public space.
- Each room would need to be analyzed to determine the level of technology that is required. Consideration should be given to providing space in the room or somewhere nearby for:
  - Visual display for presentations
  - Lighting levels
  - Shading systems over the windows
  - Sound and communications Systems
  - Recording equipment

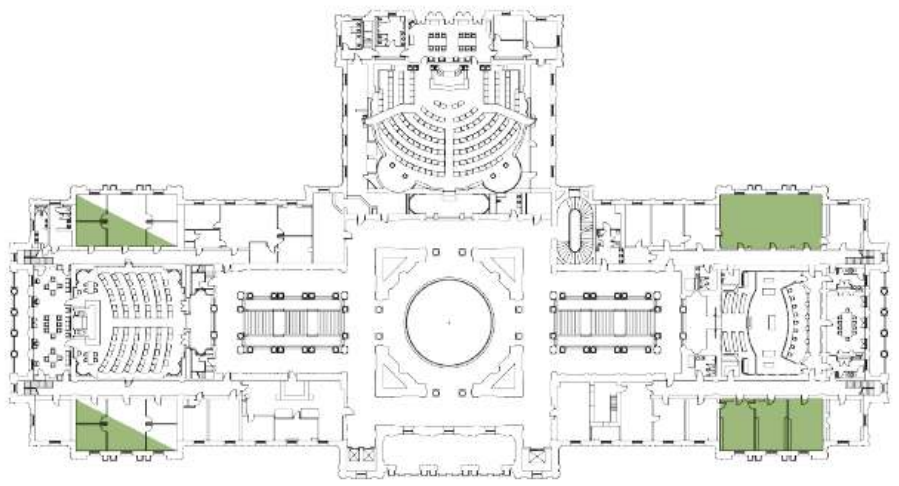
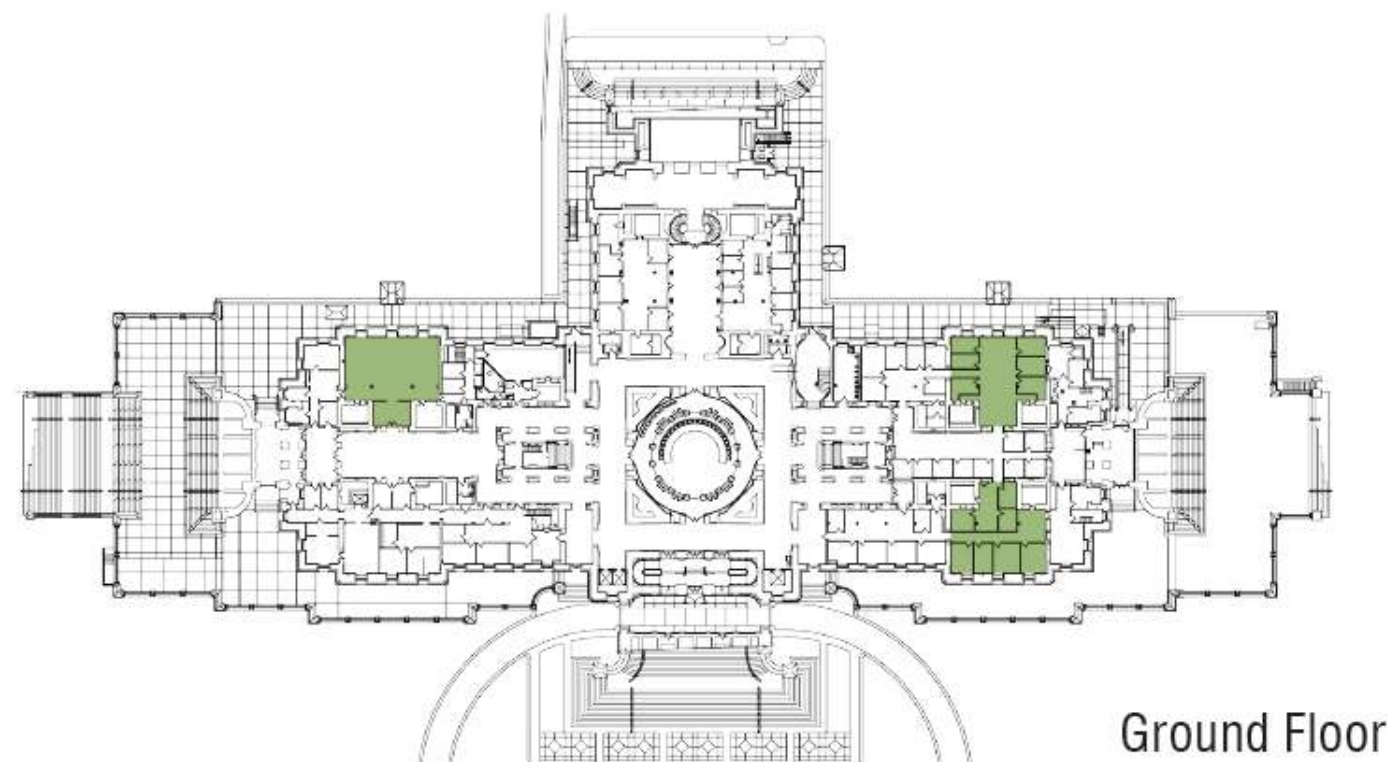


PRELIMINARY MASTER PLAN

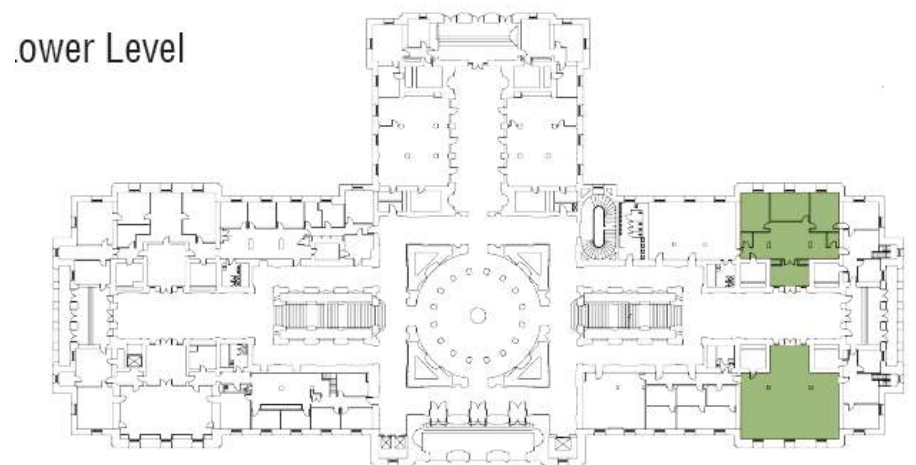
# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

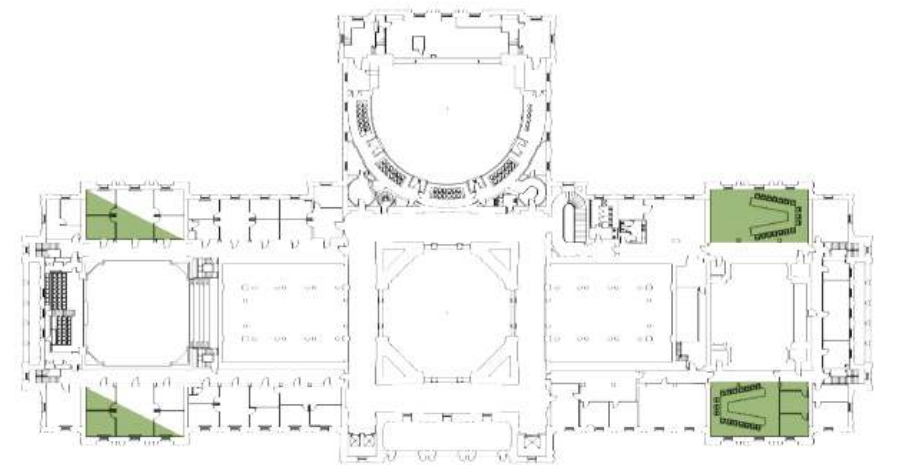
Meeting Space  
Planning Concepts



2nd Floor



1st Floor



3rd Floor

Generic Space Plan

- MEP
- Office Space
- Stair / Toilet
- Meeting Space

PRELIMINARY MASTER PLAN

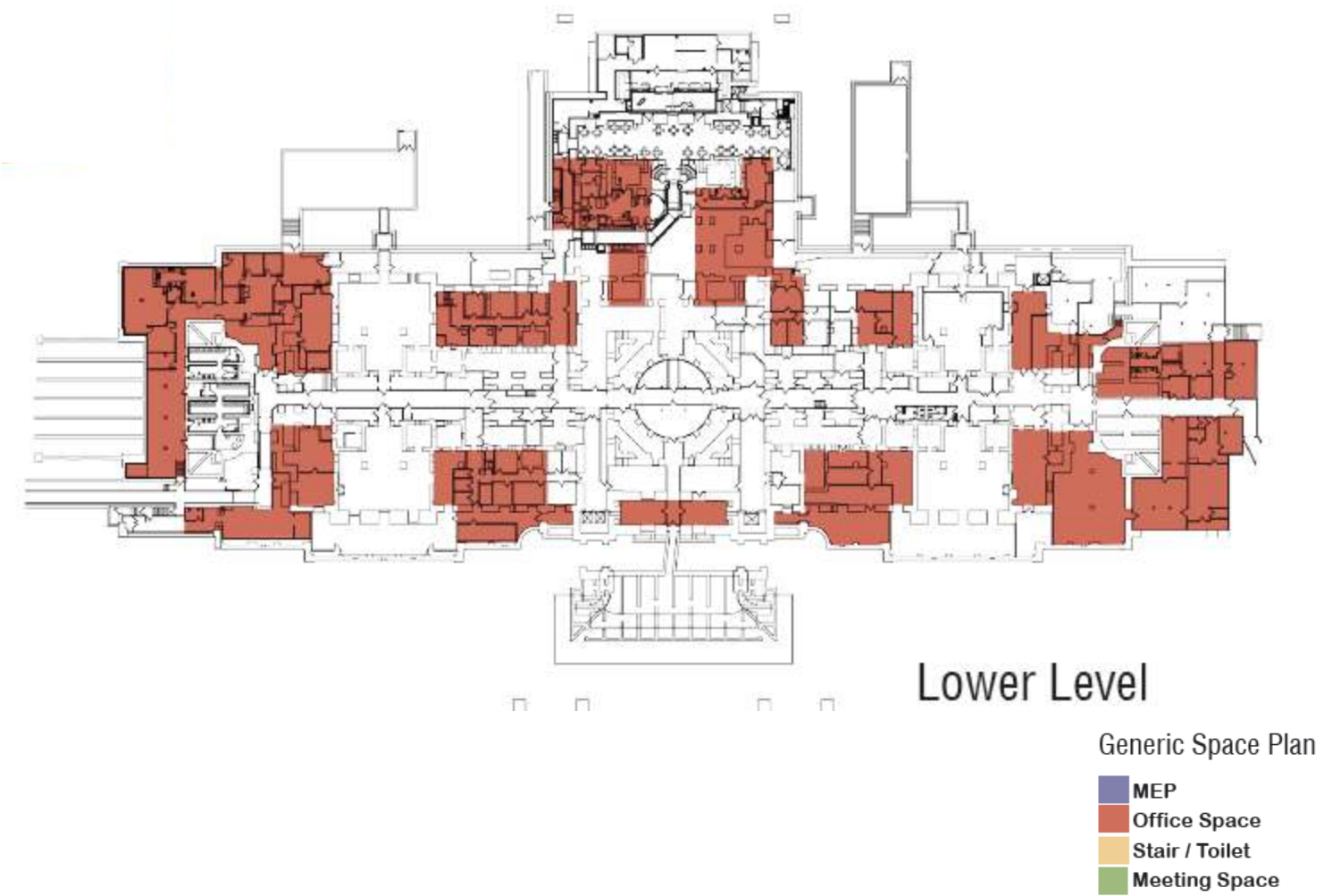
# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

## Office Space Planning Concept

### General Concept

- The Minnesota State Capitol provides office space for many of the elected officials of the State as well as their support staff.
- The office space must be designed to improve the functionality of the building and accommodate the needs of the tenants.
- While at this time the program and tenant mix is not resolved, it is known that the spaces will include members of the Executive Branch, Legislative Branch and the Judicial Branch.
- There have been several scenarios discussed by the Capitol Preservation Commission (included as an Appendix to this report). It will be imperative that the final program and design meet the needs of the occupants as determined by the Capitol Preservation Commission.



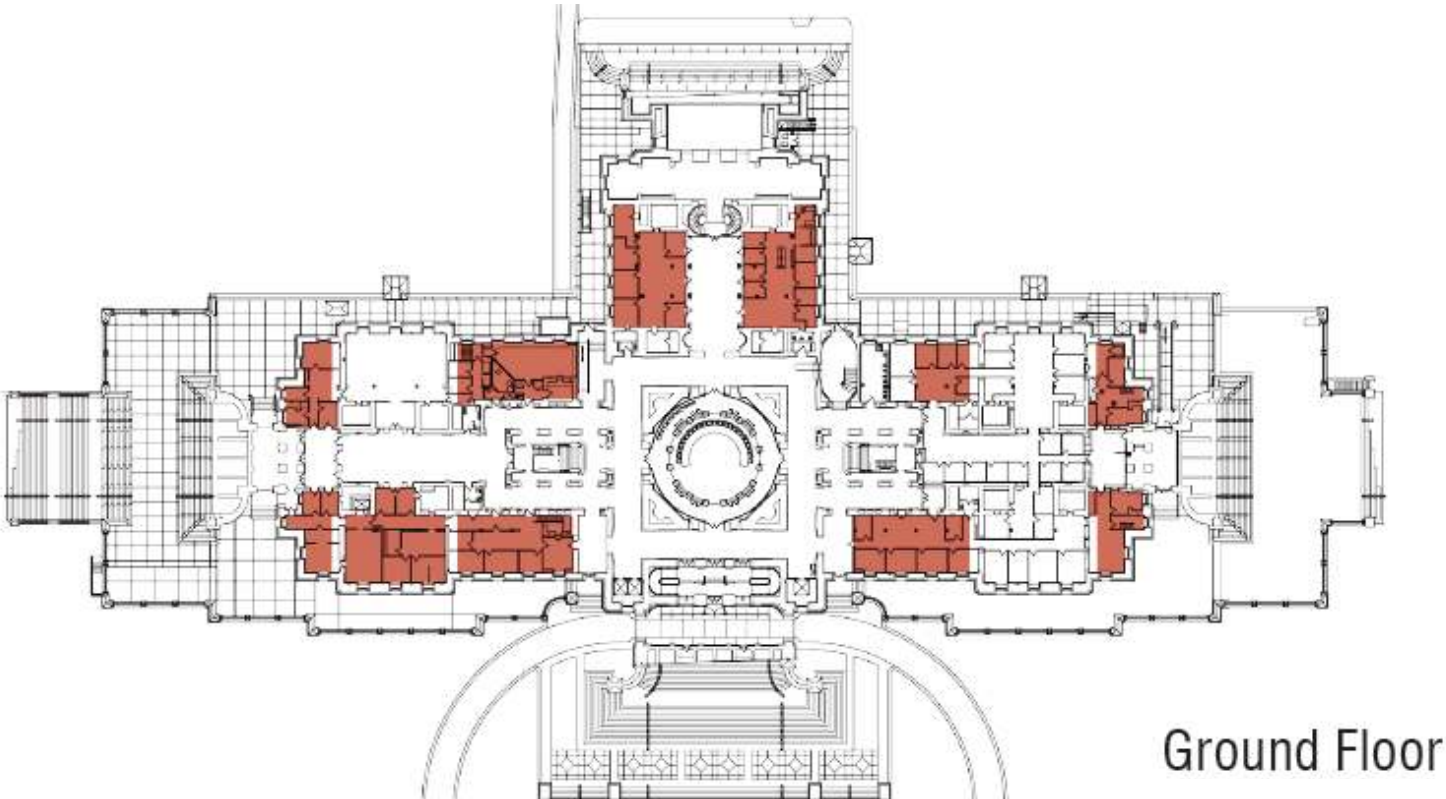
PRELIMINARY MASTER PLAN



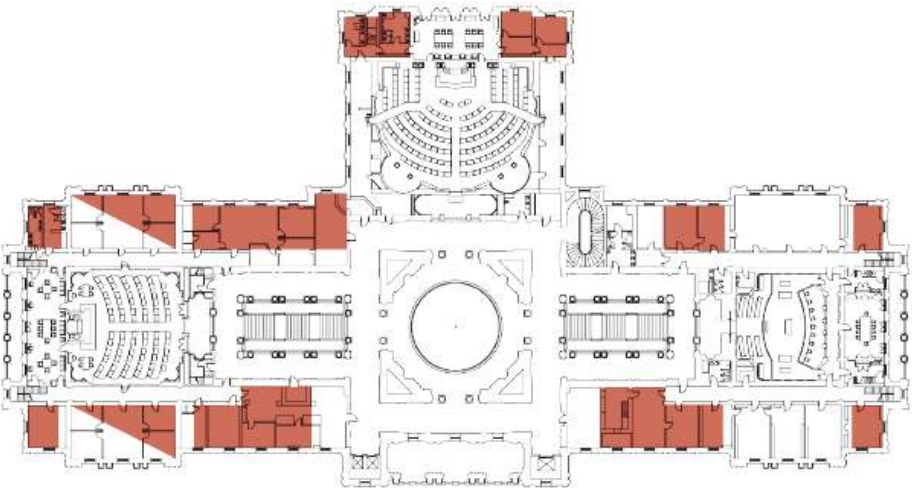
# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Office  
Planning Concept

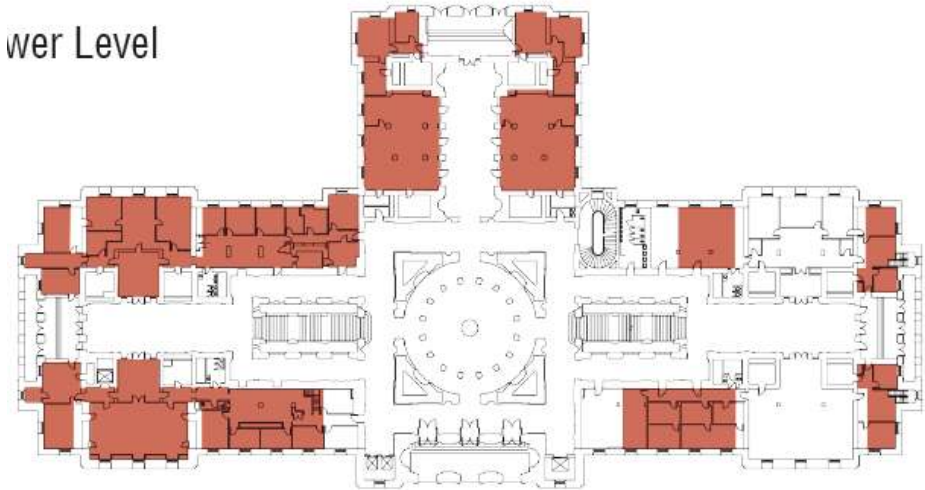
*Fiscal Years 2012-2014*



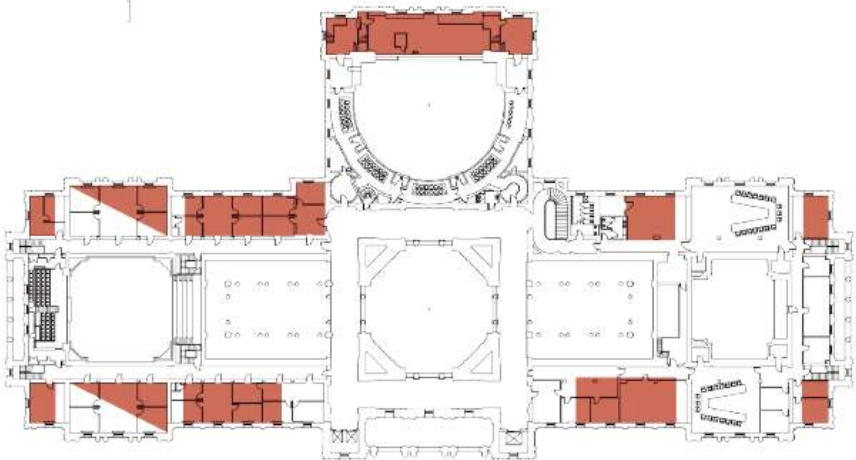
Ground Floor



2nd Floor



1st Floor



3rd Floor

Generic Space Plan

- MEP
- Office Space
- Stair / Toilet
- Meeting Space

PRELIMINARY MASTER PLAN

# SECTION TWO: PLANNING & DESIGN

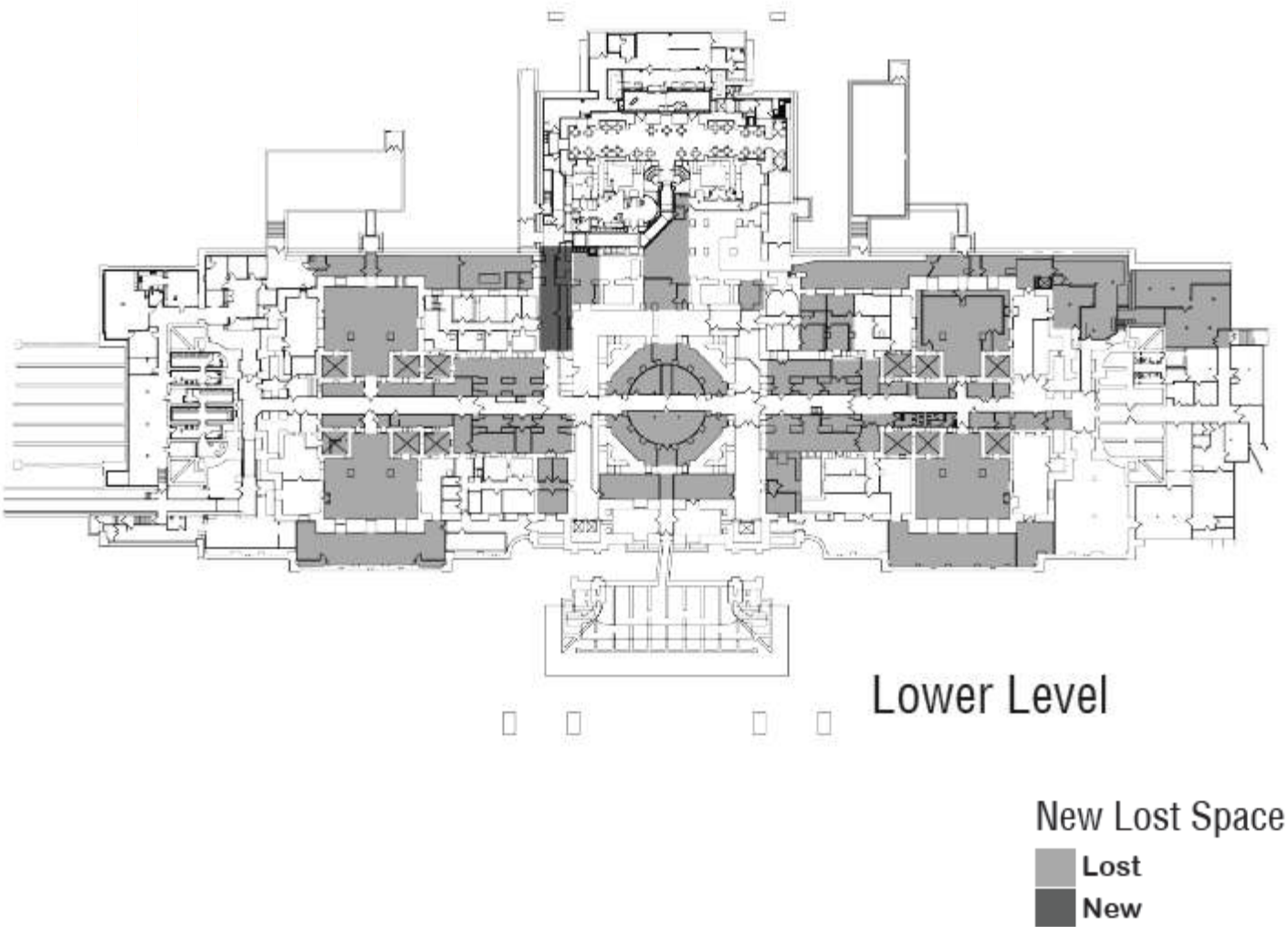
## OF THE CAPITOL RENOVATION

### Lost and Displaced Space

Fiscal Years 2012-2014

#### General Concept

- Once the renovation of the Capitol is complete, there will be a reduced amount of office space available in the Capitol as a result of providing improved, life safety, mechanical and electrical systems and meeting space.
- There will be approximately 25,900 less square feet of useable office space available on floors ground to third.
- The redesign of the basement to make it more accessible and to improve the Mechanical and Electrical Systems will reduce the basement by approximately 11,000 square feet. Approximately 32,000 square feet of useable office space will remain.
- Depending upon the final programmatic mix of which offices and branches of government occupy floor Ground through Third, all of those displaced functions could be accommodated in the newly reconfigured basement with approximately 6,100 square feet left unoccupied.
- This will result in approximately 37,000 square feet of Lost or permanently displaced space from the Capitol.
- While the amount will vary based upon the final program selected and the uses accommodated within the building, there will need to be a permanent relocation strategy developed for the displaced 37,000 square feet that will occur following the restoration.



PRELIMINARY MASTER PLAN



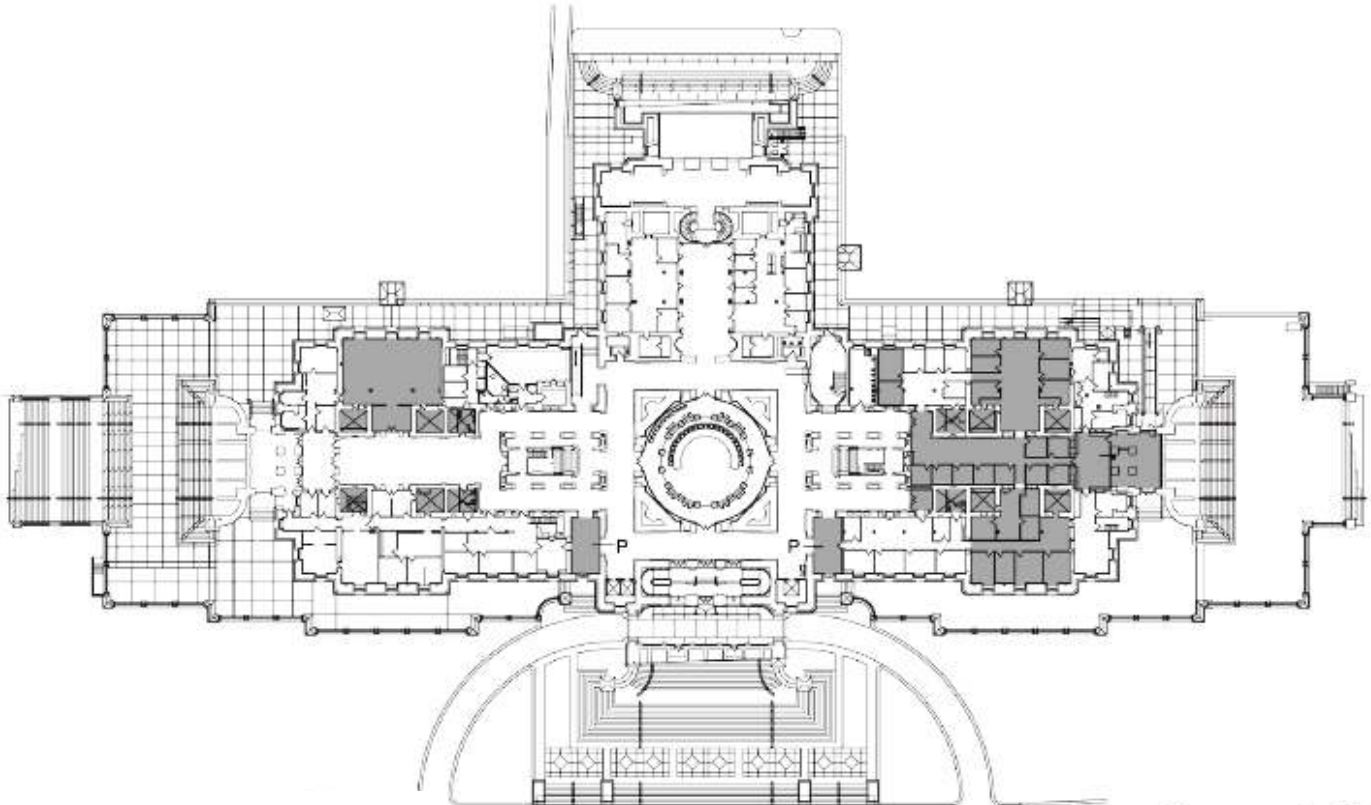
# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

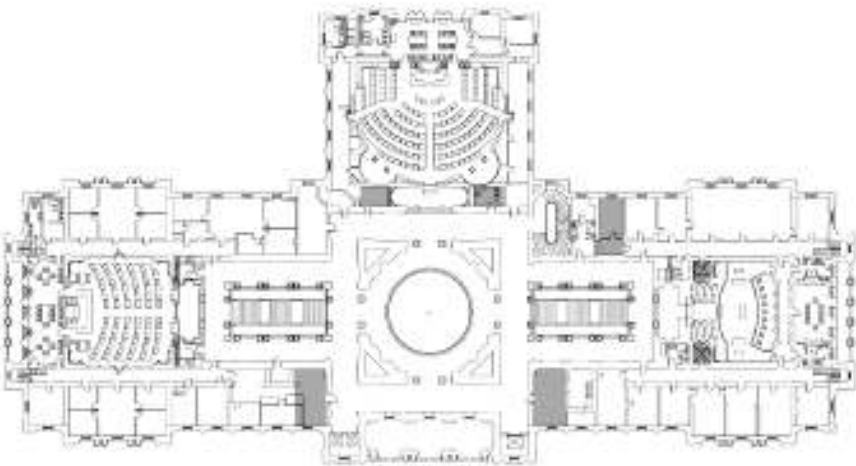
Lost and Displaced  
Office Space

New Lost Space

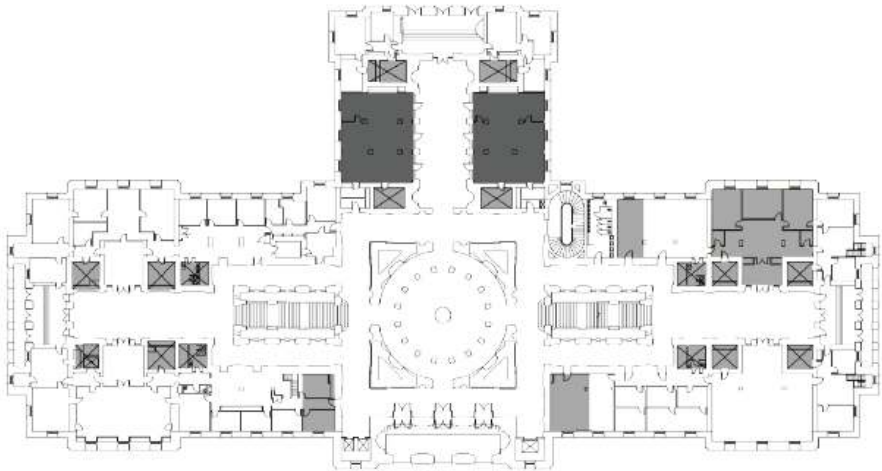
- Lost
- New



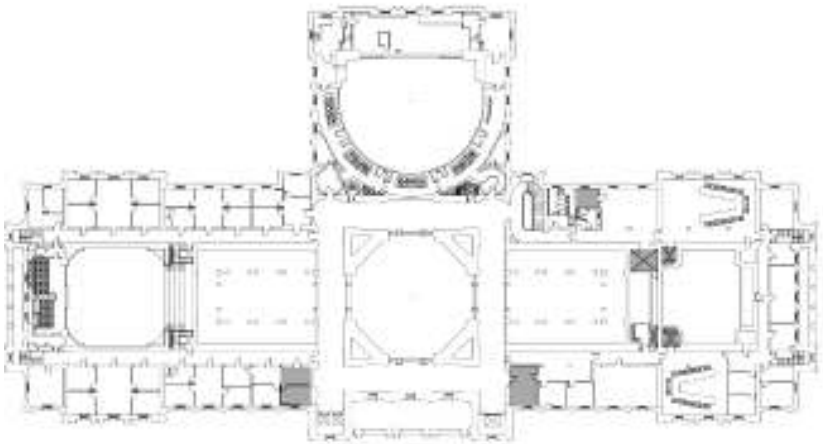
Ground Floor



2nd Floor



1st Floor



3rd Floor

PRELIMINARY MASTER PLAN



SECTION TWO: PLANNING & DESIGN  
OF THE CAPITOL RENOVATION

Swing Space - Office Space

Fiscal Years 2012-2014

General Concept

- Swing space for the restoration has been minimized by the construction sequence approach which allow for occupancy of the building during a majority of the renovation.
- Swing space will be required from 2014 to 2016, or approximately two of the four years.
- Because of the short duration and due to the return of much of the space (all but 37,000 square feet), it does not make economic sense to build new office space for this period of time.
- The suggested strategy for swing space is to the extent possible, utilize existing state owned or state leased space to absorb this temporary inconvenience while the Capitol is being restored.
- This strategy will require a shift in the working environment of many other state agencies that are not in the Capitol building but rather in the neighboring office buildings that would be either state owned or non-state owned.
- Additional temporary leased space may be needed to meet all requirements.

Minnesota State Capitol Occupants					
	ESTIMATED NO. OF STAFF	CURRENT OFFICE SQ FTG	CURRENT STORAGE SQ FTG	ESTIMATED NEW OFFICE SQ FTG (200 sf/emp)	POTENTIAL RELOCATION SPACE OPTIONS
Attorney General	17	5,404		3,400	Bremer Tower (current location of AG office)
DPS - Capitol Security	49	7,156		7,156	Administration Building
Governor's Office	40	8,878	177	8,000	Governor's residence/Admin Building/525 Park
Historical Society		1,229	827	1,229	History Center
House	39-session	18,031	5,041	8,600	G56 - COB
	29- non-session				
	4 - IT				
Media		3,751			Kelly Inn
Plant Management	17-session	1,332	923	3,400	Admin G-10/691 N. Robert
	15- non-session				
Senate	253-session	77,027	5,048	50,600	Administration Building
	?- non-session				
Services for the Blind		142	64		N/A
Supreme Court		3,631	171		Judicial Building

Space Options in State Owned Buildings					
	ESTIMATED NO. OF STAFF	CURRENT OFFICE SQ FTG	COST/SQFT	COST/YEAR	STATUS
321 Grove St.					
First Floor	215-300	43,042	\$12.65	\$544,481	Vacant
Administration Building	(280-371)	57,545		\$1,165,287	
Ground Floor	78-105	15,658	\$20.25	\$317,075	Occupied
First Floor	72-96	14,488	\$20.25	\$293,382	Occupied
Second Floor	60-80	13,720	\$20.25	\$277,830	Occupied
Third Floor	70-90	13,679	\$20.25	\$277,000	Occupied
Centennial	(74-98)	11,064		\$177,024	
Ground Floor	34-45	4,257	\$16.00	\$68,112	Vacant
Third Floor	10-16	1,866	\$16.00	\$29,856	Occupied
Third Floor	18-21	2,908	\$16.00	\$46,528	Vacant or To Be Vacated
Third Floor	12-16	2,033	\$16.00	\$32,528	Vacant
Retirement Systems					
First Floor	10-12	1,204	\$21.30	\$25,645	To Be Vacated
State Office Building					
Basement	13-17	2,587	\$14.75	\$38,158	Vacant

SECTION TWO: PLANNING & DESIGN  
OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

Swing Space - Legislative Chambers & Hearing Room Relocations

General Concept

- Legislative Chambers are the most difficult element within the Capitol to Relocate.
- The Legislative Chambers need to be relocated to a space that will accommodate both chambers and the required staff associated with the running and execution of the legislative session.
- Distance between the two House and Senate Chambers is critical so that the information can physically be transported from one Chamber to the other within a very short period of time.
- The associated office space must provide for all the needed functions of staff. A full programmatic analysis will be required to assure that the one or two sessions out of the Capitol are accommodated effectively and efficiently.
- Hearing Rooms, Committee Rooms and Committee Conference Rooms are in tremendous demand during the legislative session and are in need during the other times of the year.
- There is a relationship with committee room and conference committee rooms and the respective legislative chambers during the final weeks of the session where time is of the essence and traveling long distances from the Chamber to the committee room is not feasible.

Potential Hearing Room Relocations					
	CURRENT DEDICATED OFFICE SQ FTG	CURRENT SHARED SQ FTG	COST/SQFT	COST/YEAR	POTENTIAL RELOCATION SPACE OPTIONS
Capitol Building					
Rm # G15	2,988		\$27.15	\$81,124	
Rm # 107	1,636		\$27.15	\$44,417	
Rm # 112	1,643		\$27.15	\$44,607	
Rm # 123	1,971		\$27.15	\$53,513	
Rm # 125	896		\$27.15	\$24,326	
Rm # 318	1,191		\$27.15	\$32,336	
Andersen 2nd Floor					
Rm # 2360	1,493		\$29.00	\$43,297	
Rm # 2370	2,263		\$29.00	\$65,627	
Rm # 2380	2,429		\$29.00	\$70,441	
Rm # 2390	1,563		\$29.00	\$45,327	
Centennial					
Ladyslipper	1,083	483	\$16.00	\$25,056	
Freeman - 1st Floor					
Rm # B144/B145	2,821		\$32.78	\$92,472	
Rm # B149	764		\$32.78	\$25,044	
Stassen				\$0	
Skjegstad	3,444		\$14.75	\$50,799	
Vets Building				\$0	
5th Floor	1,317		\$22.20	\$29,237	

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

## Implementation

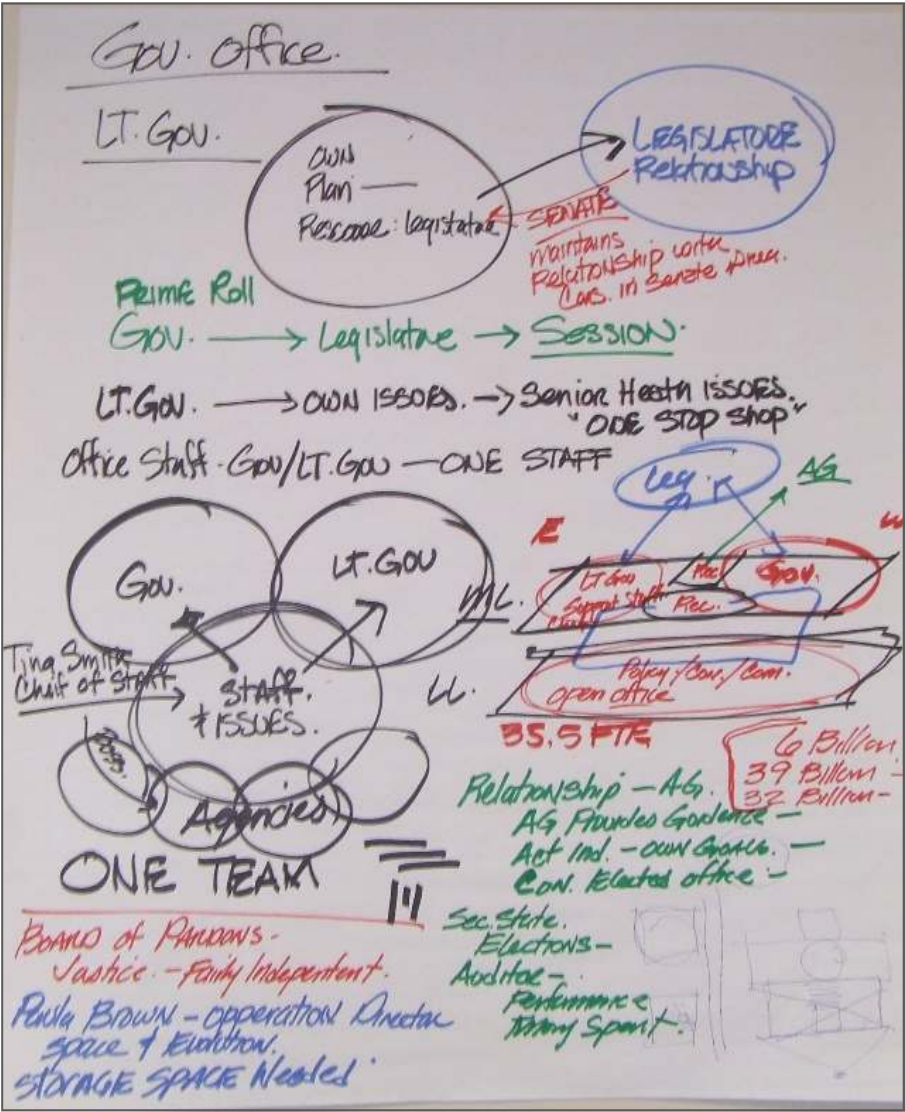
### I. 2012 - Owner Project Manager

- A. Selection of the Owner Project Manager (OPM) for the entire project. The OPM shall work directly for the State and advise them on the over process and progress of the Project. They shall work a an extension of the Capitol Preservation Commission.
- 1. The OPM shall complete the Preliminary Master Plan that has been developed. When complete the Comprehensive Master Plan will fully outline the process for the Restoration as well as for the Care and Maintenance of the Capitol for the next 25 years.
- 2. The OPM will provide project definition services to support the guiding principles of the Capitol Preservation Commission and identify those elements which the Board feels must be incorporated in the restoration.
- 3. The OPM will work with the selected architect, engineers and CM to plan and design the project with in the established budget and schedule.
- 4. Working with the Capitol Preservation Commission and the AEC the OPM will assure that all planning actives are completed and in order for the functioning of government both during and after the restoration of the Capitol.

## Implementation

### I. 2012 - Architect, Engineer/Construction Manager (AEC)

- A. Selection of the Architect/Engineer/Construction Manager (AEC) team that will be responsible for the final design and construction of the two extension buildings.
- 1. The AEC team will work with OPM to complete the preliminary pre-design that has been developed. The Pre-Design package when complete will conform to state guidelines.
- 2. This AEC team will meet with the OPM to review and discuss the comprehensive master plan, design guidelines and imperatives.
- 3. The AEC team will start work immediately following the legislative session in July 2012 on the documentation of "Construction Sequence One", the mechanical attic, and the swing space in accordance with the master plan.
- 4. The AEC team will complete design and documentation work before the end of 2012 on "Construction Sequence One" in order to begin construction of the attic mechanical space prior to the end of 2012.



## PRELIMINARY MASTER PLAN



# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

## Implementation

### I. 2012 to 2014 Planning and Design

- A. The selected AEC team will work together with the OPM and the Capitol Preservation Commission to develop the restoration documentation as follows
  - 1. The AEC team will work with the given schedule to provide the documents and the construction in the specified sequence of the work.
  - 2. The AEC team will work with the OPM to finalize the construction sequences of the work in accordance with the Master Plan and shall identify the number and timing of all bid packages and complete the design documents no later than November 1st of 2015.
  - 3. The AEC team will assist the Capitol Preservation Commission and the OPM in keeping the building open during the 2013, 2014 and 2016 sessions. The building will be closed for the 2015 session and will reopen for the 2016 session.
  - 3. The AEC team will work with the OPM and the Capitol Preservation Commission to understand and to resolve the space planning issues no later than the start of the 2014 general session.
  - 4. The AEC team will complete all design services and documents by the end of 2014. This includes all bid packages.

## Implementation

### I. 2012 to 2016 Pre-Construction and Construction

- A. The selected CM shall work with the OPM and the Capitol Preservation Commission to keep as much of the Capitol building open to the general public and to the state employees and elected officials as is possible without exposing anyone to undue risk of health or safety.
  - 1. The CM shall maintain a clean and orderly site at all times, safe from trip and other hazards.
  - 2. All General Conditions shall be the responsibility of the CM.
  - 3. The CM shall organize the work to minimize dust, noise and commotion during operating hours.
- 3. The CM and the AE will make special concession to the elected officials during the course of the construction in order for the state to conduct the people's business. This may include relocating and stopping work in an area to allow for meeting and or protests to occur as part of the natural process of government.
- 4. The CM shall take all necessary precautions when working in the Capitol while it is open to the public to protect the public from harm. The CM shall provide safe enclosures that will protect the public while not creating an unsightly appearance in the Capitol Building.



PRELIMINARY MASTER PLAN

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

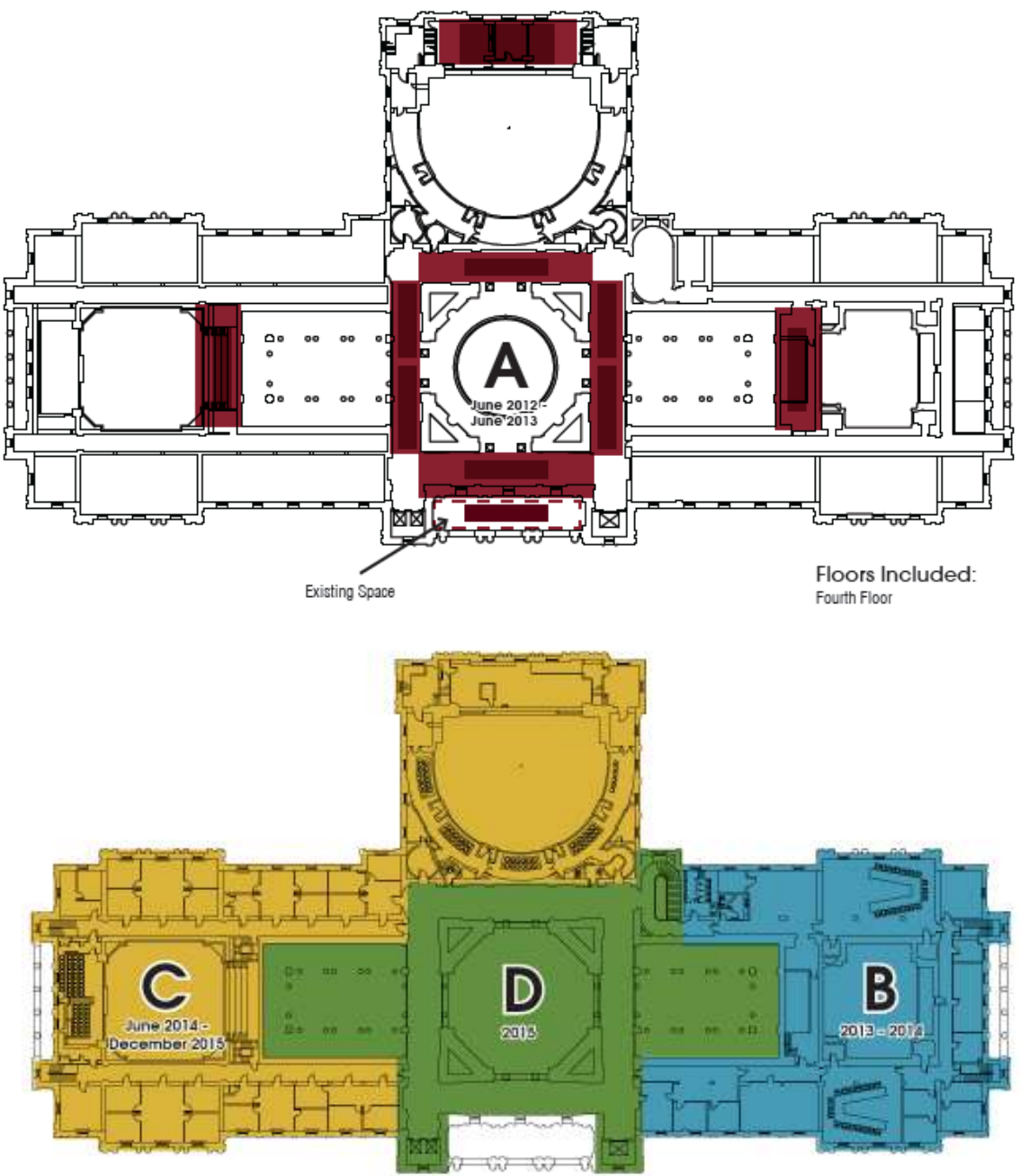
## Sequencing of Construction

Sequencing of construction will be critical in order to:

- Accomplish the restoration in a timely manner
- Allow the public and occupants of the Capitol more time in the Capitol prior to Closing
- Control costs
- Manage expectations of the Public and elected officials

These sequences have been design to accomplish these four items. The sequences are:

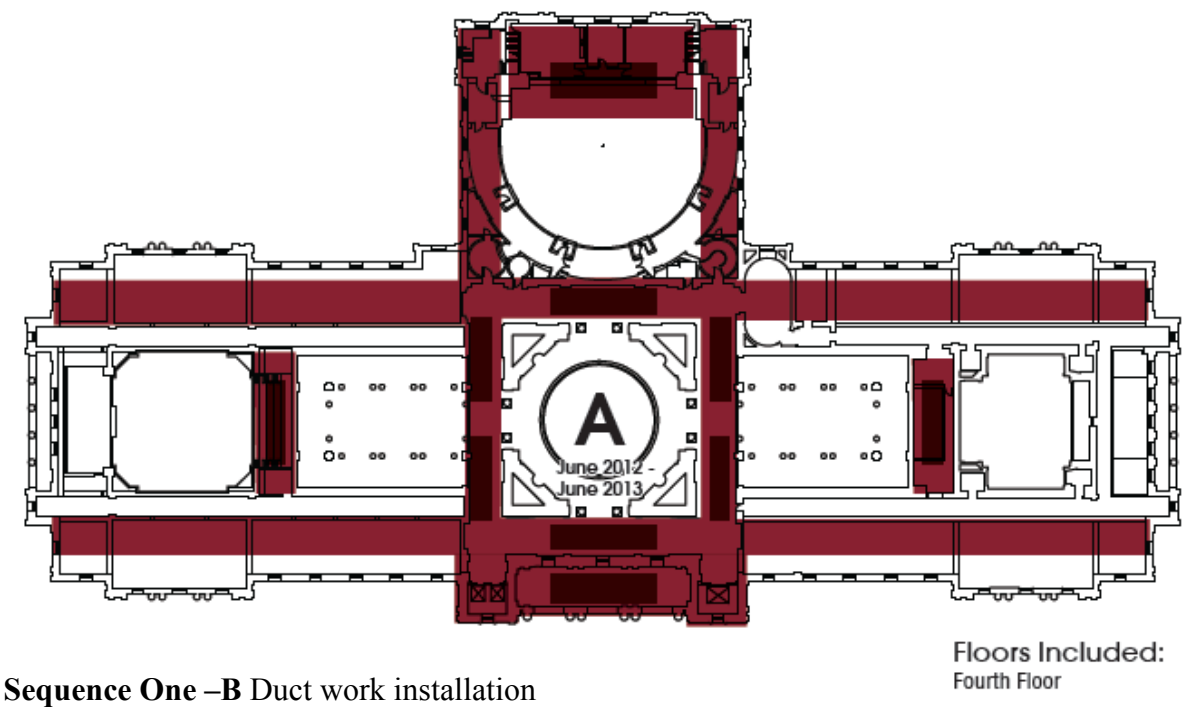
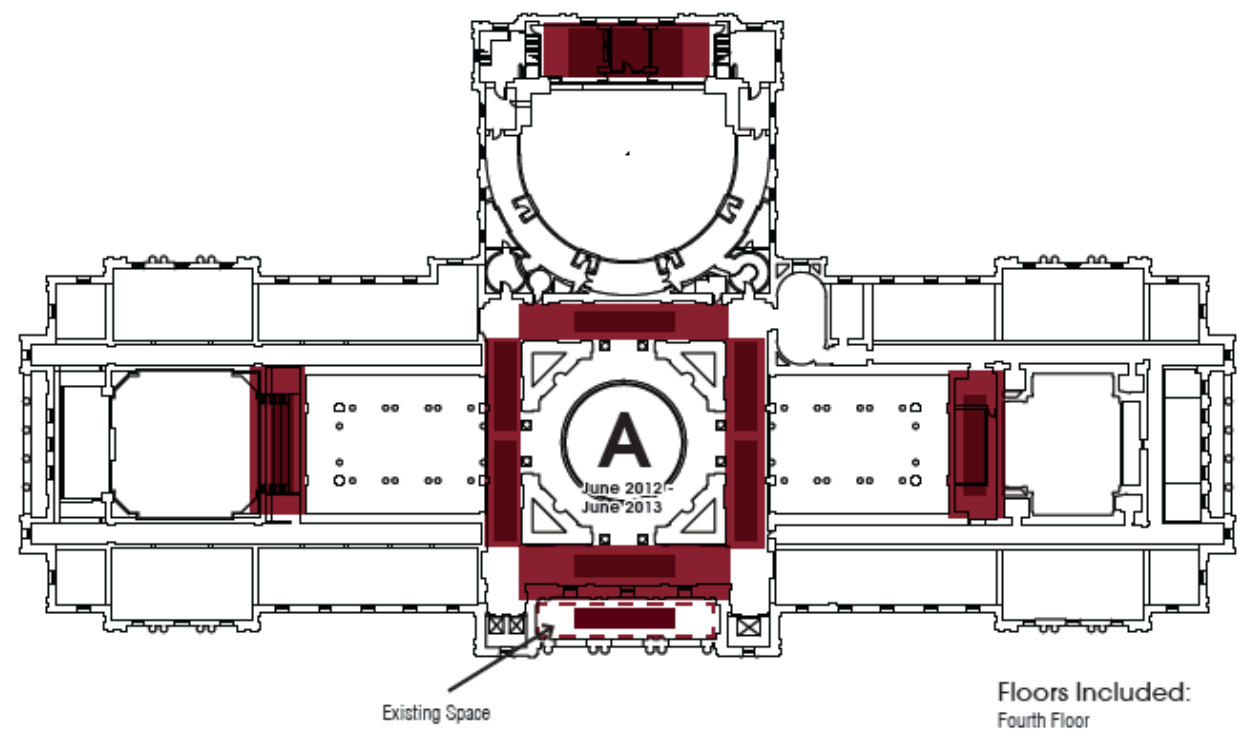
- Sequence “A” Attic and Roof Mechanical and Electrical preparation; Begin Work on Exterior Envelope
- Sequence “B” East Wing Renovation
- Sequence “C” North and West Wing Renovation
- Sequence “D” Public Space Recapture and Restoration.



PRELIMINARY MASTER PLAN

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

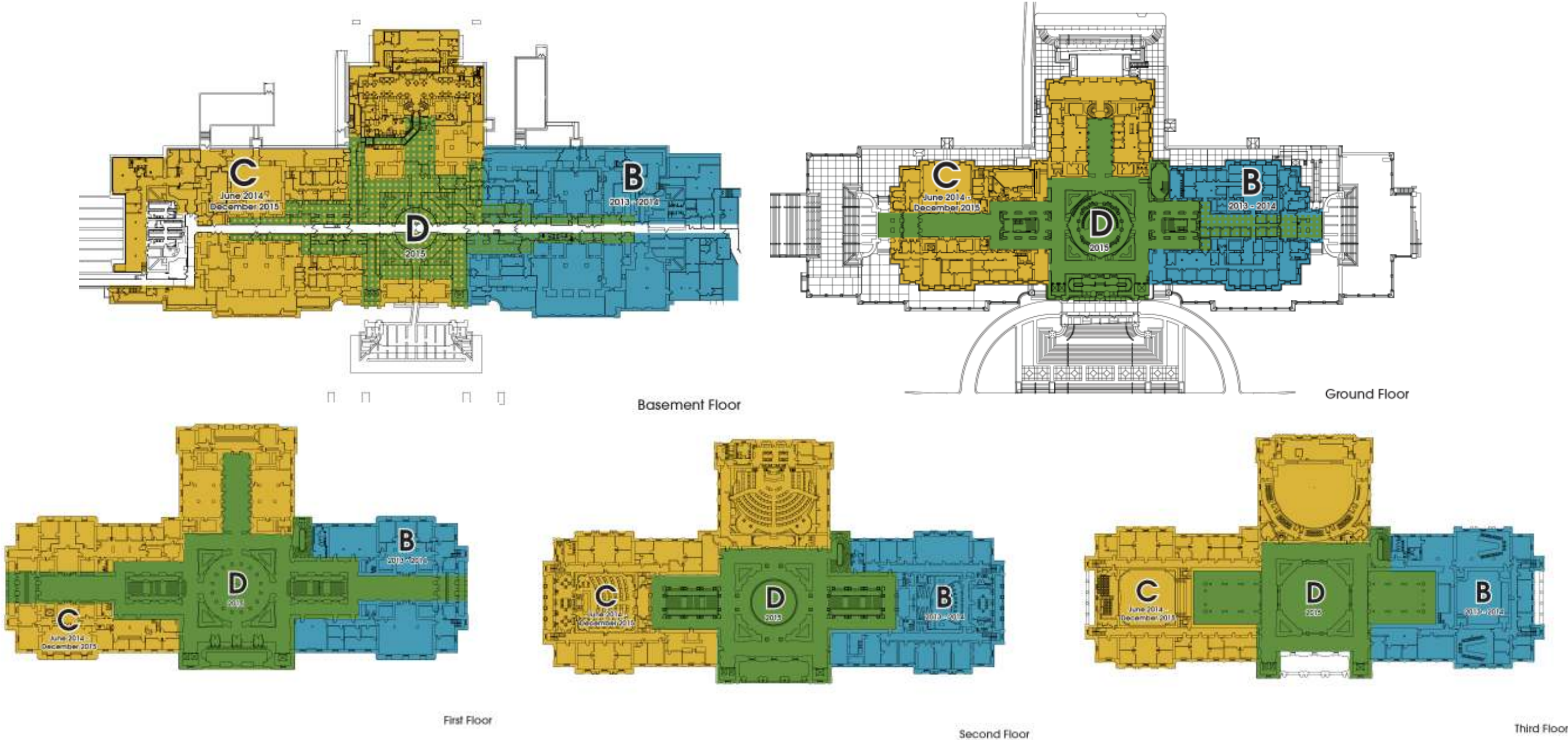


Sequence One –B Duct work installation



# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014



PRELIMINARY MASTER PLAN

# SECTION THREE:

## SEQUENCE “A” - ATTIC MECHANICAL INSTALLATION

Fiscal Years 2012-2013

### Activities

#### General Activities

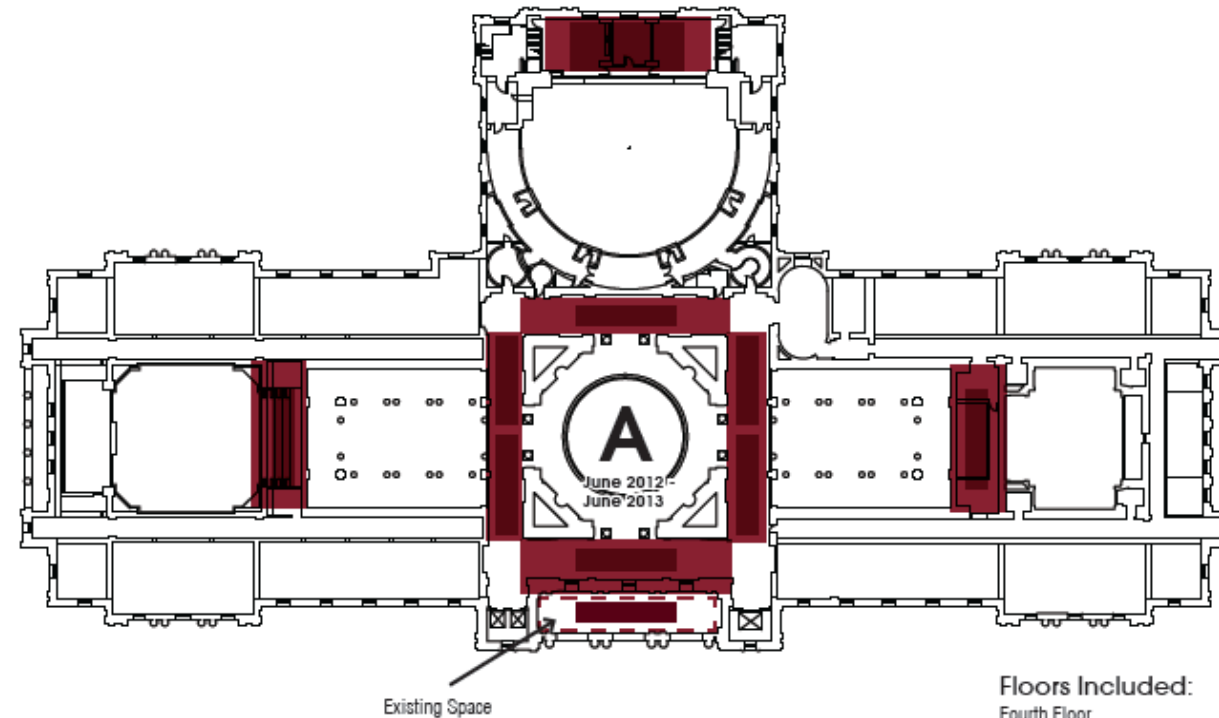
- To begin the mechanical and electrical systems installations.

#### Design Activities

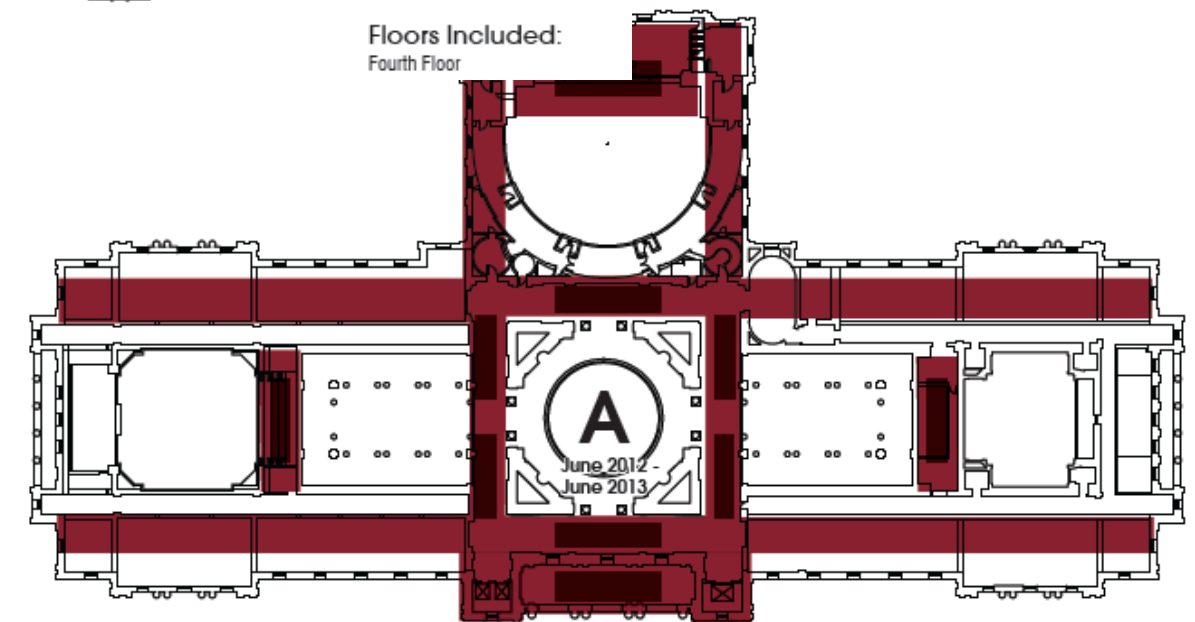
- The AEC team will work together starting in July of 2012 to quickly layout and design the structural slabs that will support the new mechanical air handling units. These units will be designed to fit within the available attic space.

#### Construction Activities

- Construct the concrete slab floors that will support the mechanical equipment.
- Provide structural support to hang plaster ceilings independent of the new floor structure.
- Construct mechanical room floors with provisions for waterproofing and floor drains.
- Provide permanent access for regular and periodic maintenance.
- Provide removable roof panels for access to move equipment into place.
- Provide outside air and relief air connections to the outside.



Sequence One – A Mech. Floor & Equipment



Sequence One –B Duct work installation

PRELIMINARY MASTER PLAN



# SECTION THREE:

## SEQUENCE “A” - ATTIC MECHANICAL INSTALLATION

Fiscal Years 2012-2013

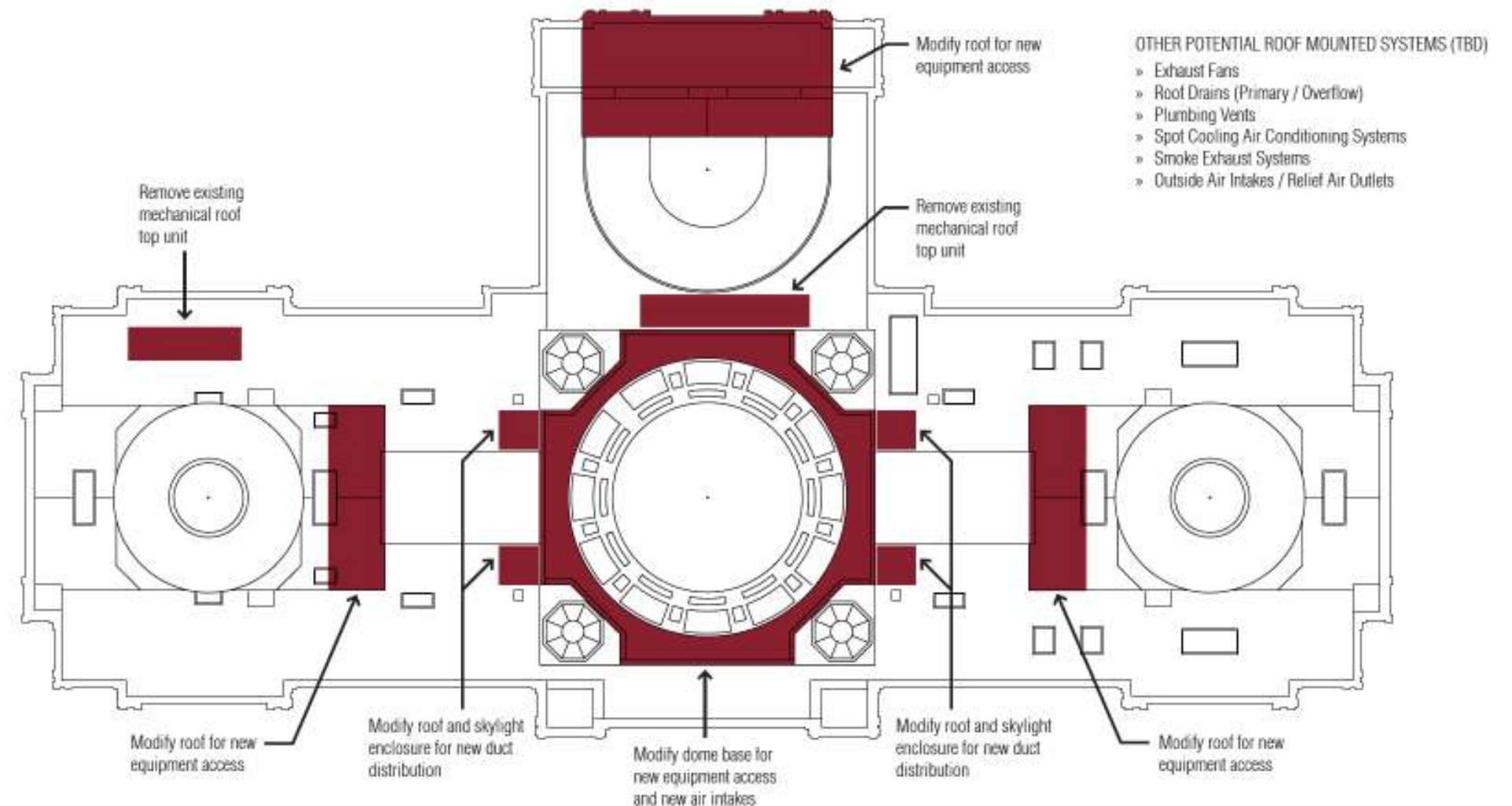
### Implementation

#### I. 2012

- A. The integrated AEC team will begin the planning and design work for the attic mechanical and electrical systems in conjunction with the overall design of the Capitol Restoration.
- B. The MEP “Sequence One” work will occur while an early package will need to be fully coordinated with the overall design of the project.
- C. The Mechanical and Electrical Engineers will closely coordinate the sequence of the work with the architectural designs with the Construction Manager’s understanding of the existing building infrastructure.
- D. Following the legislative session, the Construction Manager may perform selected demolition within the building to understand the infrastructure and the openings that were originally designed into each floor.

#### II. 2013

- A. Demolition and preparation at the roof for construction activities shall begin in late May.
- B. Installation of the new floor slabs that will support the air handling units shall begin in July.
- C. Completion of attic preparation.
- D. Begin repairs on exterior stone and window replacement



Roof Plan

PRELIMINARY MASTER PLAN



# SECTION FOUR: SEQUENCE “B” EAST WING CLOSURE

Fiscal Years 2013-2015

## Activities

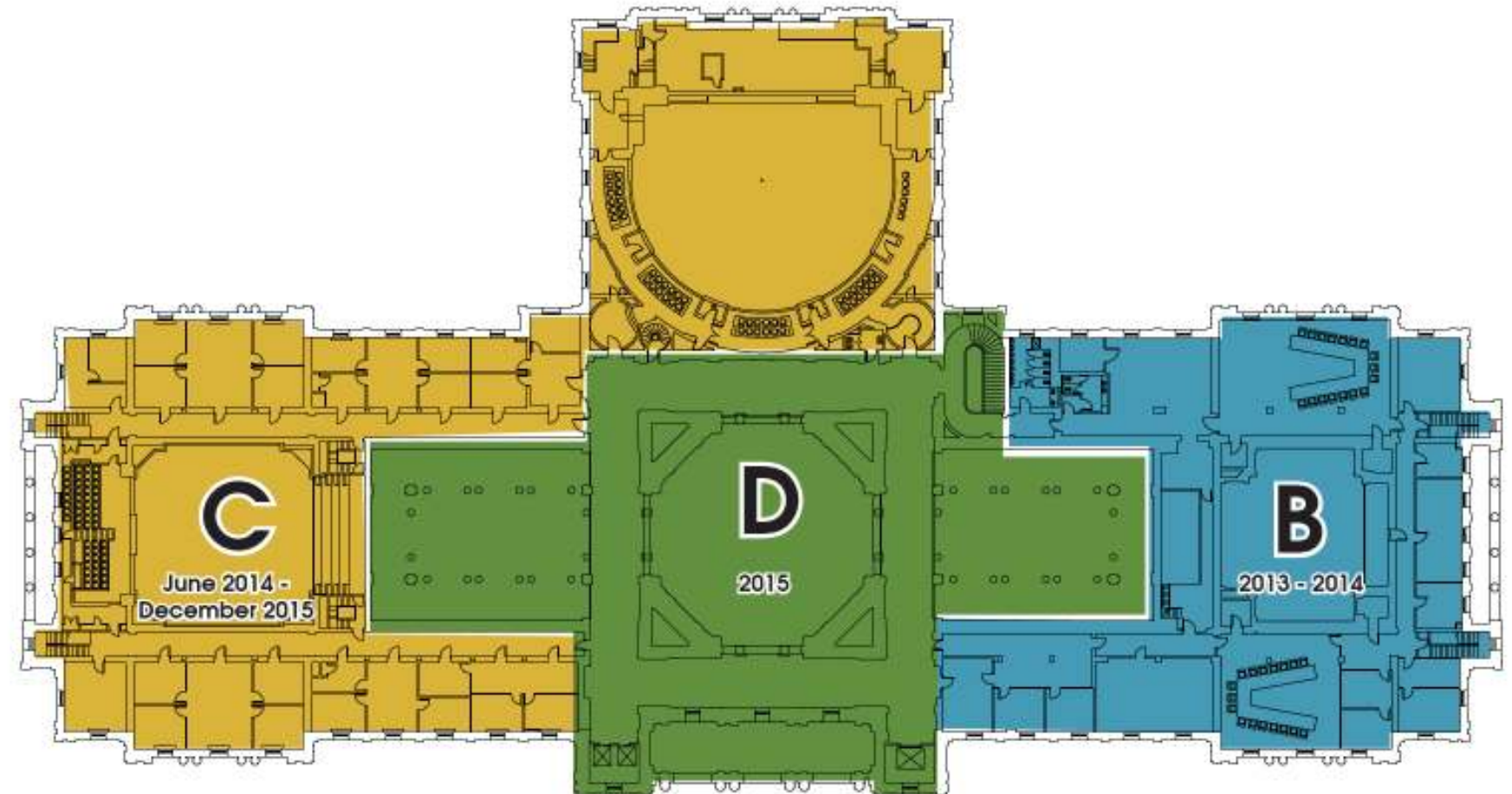
East Wing Closure and Restoration

### I. 2012

- Working with the stakeholders and the Capitol Preservation Commission the AEC team will develop the documents for:
  - Swing and Permanent space layouts
  - Abatement
  - Demolition
  - Vertical Mechanical and Electrical Distribution
  - Meeting Room Standards that may be adapted to the large spaces in the east wing.
- The AEC team will issue documents for the build out of the swing space and permanent space for those occupants to be relocated. This space must be ready for occupancy immediately following the legislative session in 2013.

### II. 2013

- The AEC team will finalize all documents and bids in preparation for the beginning of construction.
- The AEC team will continue to work with the OPM, Stakeholder and the Capitol Preservation Commission to determine the space organization and office locations within the Capitol.
- Immediately following the Legislative Session in 2013 all occupants of the east wing from floors basement to third floor will be relocated to the associated swing or permanent space.
- Once the occupants are relocated from the Capitol the east wing from the Basement to the fourth floor would be closed. The CM would seal off the space from the public for safety purposes.



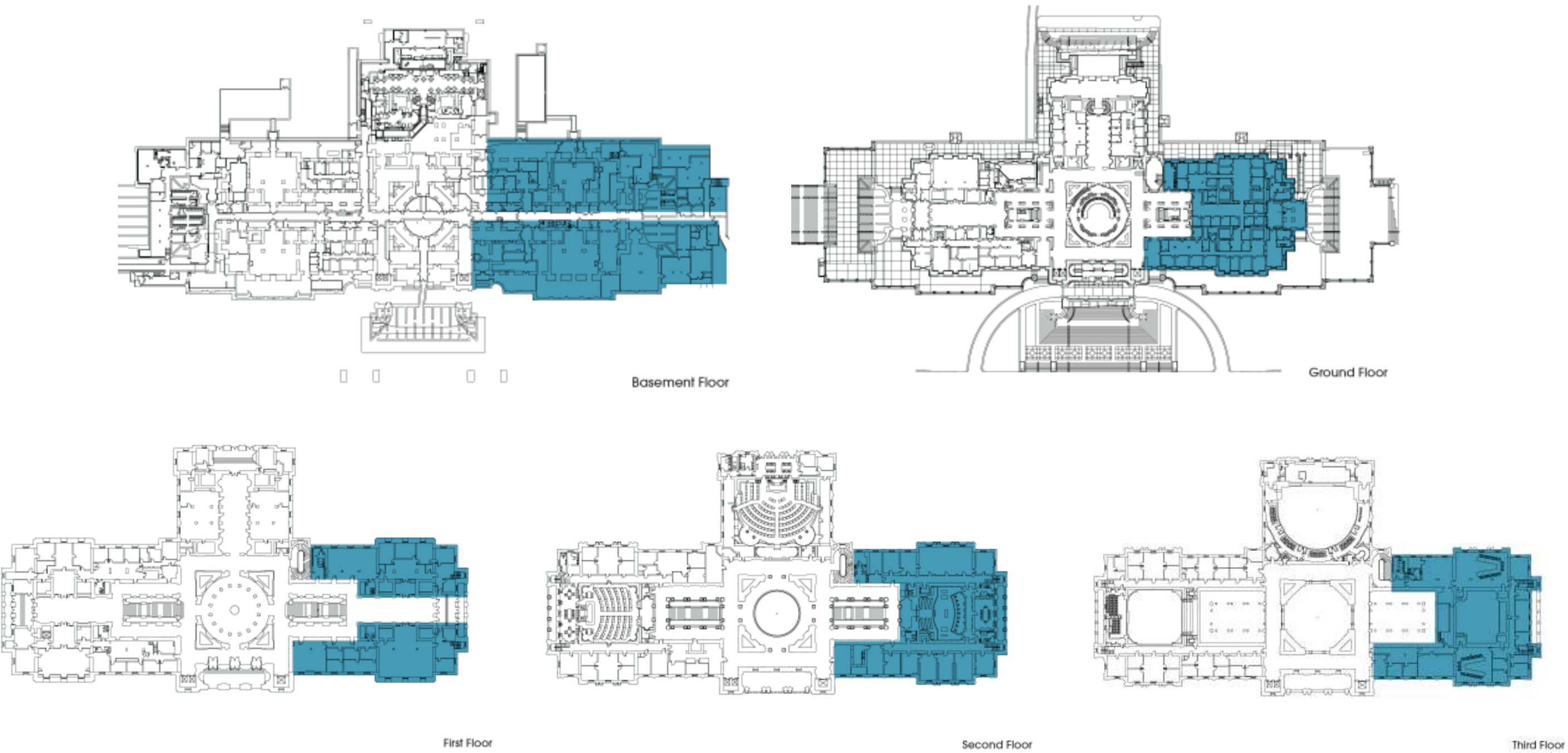
Floors Included:  
Lower Level    Second Floor  
Ground Floor    Third Floor  
First Floor

PRELIMINARY MASTER PLAN

# SECTION FOUR: SEQUENCE “B” EAST WING CLOSURE

Activities

Fiscal Years 2013-2015



PRELIMINARY MASTER PLAN

SECTION FOUR:

SEQUENCE “B” EAST WING CLOSURE

Implementation

Fiscal Years 2013-2015

II. 2013 Continued

- Abatement and Demolition of the interior of the East wing would be the first construction activity to begin.
- Following the abatement and the demolition of all interior non-historic walls and partitions, as well as the existing mechanical and electrical components, the CM will work through the layout process for the new Mechanical and the Electrical locations.
- New Mechanical and Electrical systems to be installed with order to minimize maintenance costs and to provide a flexible and adaptable platform for future modifications. The order is to start in the basement floor for Electrical distribution and District Energy Services and in the attic for the air distribution.
- The CM working with the selected Mechanical and Electrical contractors will install the mechanical, electrical, communication, and other systems in the vertical chases that are identified in the bid documents.
- Note: the selection of the Mechanical and Electrical Sub-contractors is a critical step in the restoration process. It is highly recommended that the OPM and the CM work together to develop a selection process that would allow the Mechanical and Electrical Sub-contractors to be selected for the entire Capitol restoration verses the possible selection of different sub-contractors for different phases of the work which may have an impact on both responsibility and quality.*

III.2014

- During the 2014 Legislative session the CM shall take precautions to eliminate noise, dust and other construction activities that will interfere with the legislative session. The construction activities may need to be stopped or relocated to another location in the building during this time. The AEC team should consider this during the planning process so as to help in coordinating the work with the legislative

timeline.

- OPM, Stakeholders and the Capitol Preservation Commission shall finalize the space layout or office locations for the occupants of the Capitol following the legislative session in 2014 . This will allow the AEC team to move forward with documentation for the office and associated spaces within the east wing and throughout other parts of the Capitol.
- The AEC team will coordinate the release of the tenant finish package with the completion of the mechanical and electrical vertical systems integration into the building.
- The tenant finish package will provide information on both the public meeting locations and the office space.

IV. 2015

- The east wing includes a public area that has been used as an office space for many years. This space will be returned to public use and will be designed as a gathering space for the public prior to attending committee room meetings. The pubic space will be returned to it’s original Cass Gilbert design, which will include the restoration of:
  - Light fixtures
  - Plaster ceiling using the same techniques used originally
  - Decorative painting identical to the other locations on the ground floor
  - Floor material will be reinstalled or cleaned to maintain the public space
- The AEC team will issue the Public Space Package as a separate bid package due to it’s unique requirement and products.
- The OPM and the CM will investigate the opportunity of issuing this bid package using design assist contracting due to the unique nature of this portion of the work.

- Note: This will be the first of two bid packages that will consider the complete restoration of elements of the building within the pubic space. These elements; decorative painting, bronze light fixtures, floor finishes, wall treatment and plaster ceiling work, are artisan trade type elements and ,as such, should be procured as a design assist process and they should be procured for the entire project so at to not mix and match different artistic styles within the same building. This will alleviate the already complicated process of restoring the Cass Gilbert designs.*
- It is anticipated that all work will be complete as follows:

Abatement and Demolition -	Jun. 2013
Vertical MEP Systems installation -	Mar. 2014
Tenant Finish build out complete -	Jun. 2015
Public Space Restoration -	Oct. 2016

V. 2016

- Project Complete



# SECTION FIVE: SEQUENCE “C” NORTH & WEST WING CLOSURE

Fiscal Years 2014-2016

## Activities

North and West Wing Closure and Restoration

### I. 2012

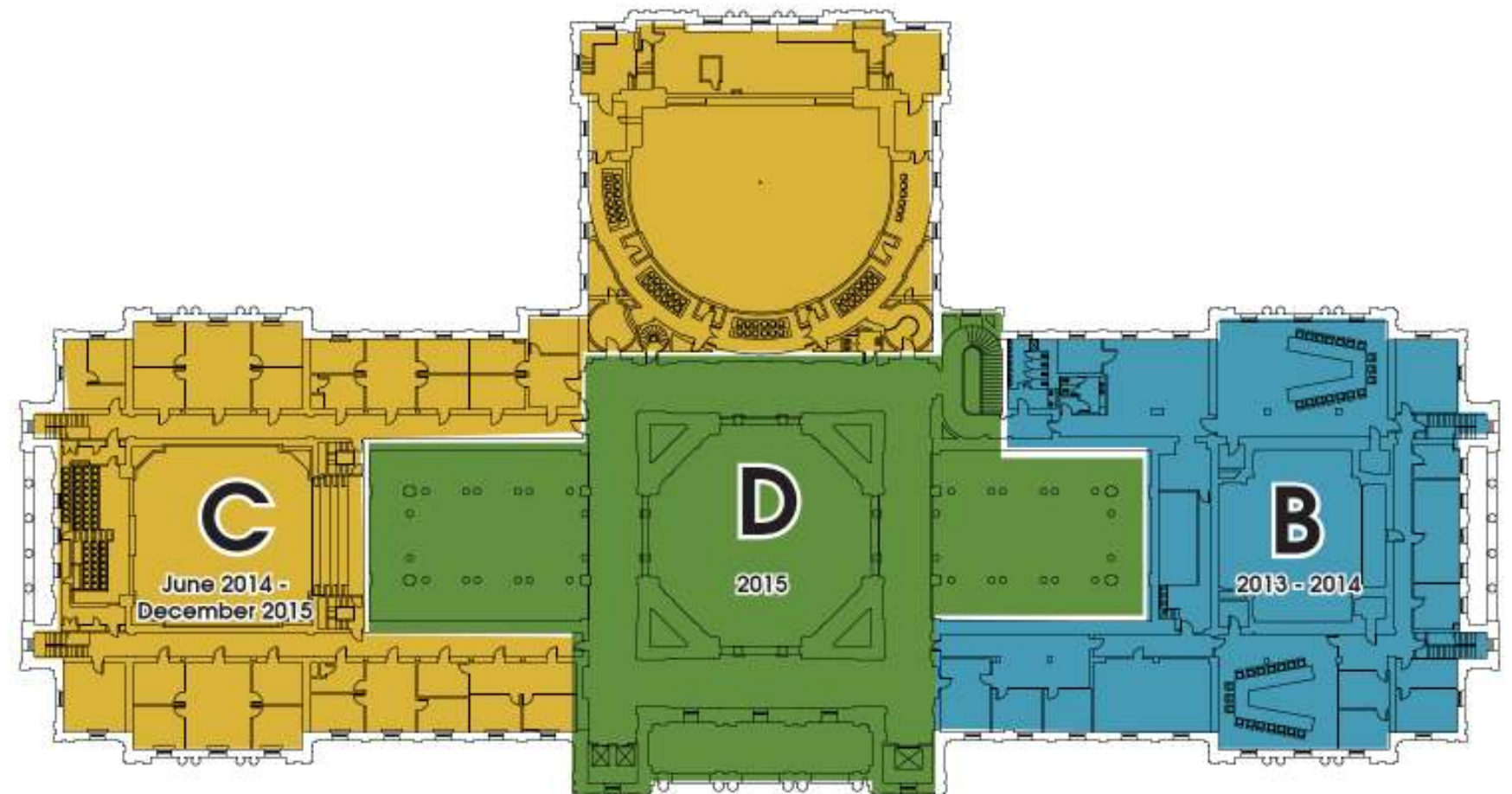
- Working with the stakeholders and the Capitol Preservation Commission, the AEC team will develop the documents for:
  - Swing and Permanent space layouts
  - Abatement
  - Demolition
  - Vertical Mechanical and Electrical Distribution
  - Meeting Room Standards that may be adapted to the large spaces in the east wing.

### II. 2013

- The AEC team will issue documents for the build out of the swing space and permanent space for those occupants to be relocated. This space must be ready for occupancy immediately following the legislative session in 2014.
- The AEC team will finalize all documents and bids in preparation for the beginning of construction.
- The AEC team will continue to work with the OPM, Stakeholder and the Capitol Preservation Commission to determine the space organization and office locations within the Capitol.

### III. 2014

- Immediately following the Legislative Session in 2014 all occupants of the east wing from floors basement to third floor will be relocated to the associated swing or permanent space.
- Once the occupants are relocated from the Capitol the Capitol North and the West wings from the Basement to the fourth floor the Capitol will be Closed to the public.
- Abatement and Demolition of the interior of the North and the West wings would be the first construction activity while other construction is proceeding in the East wing.



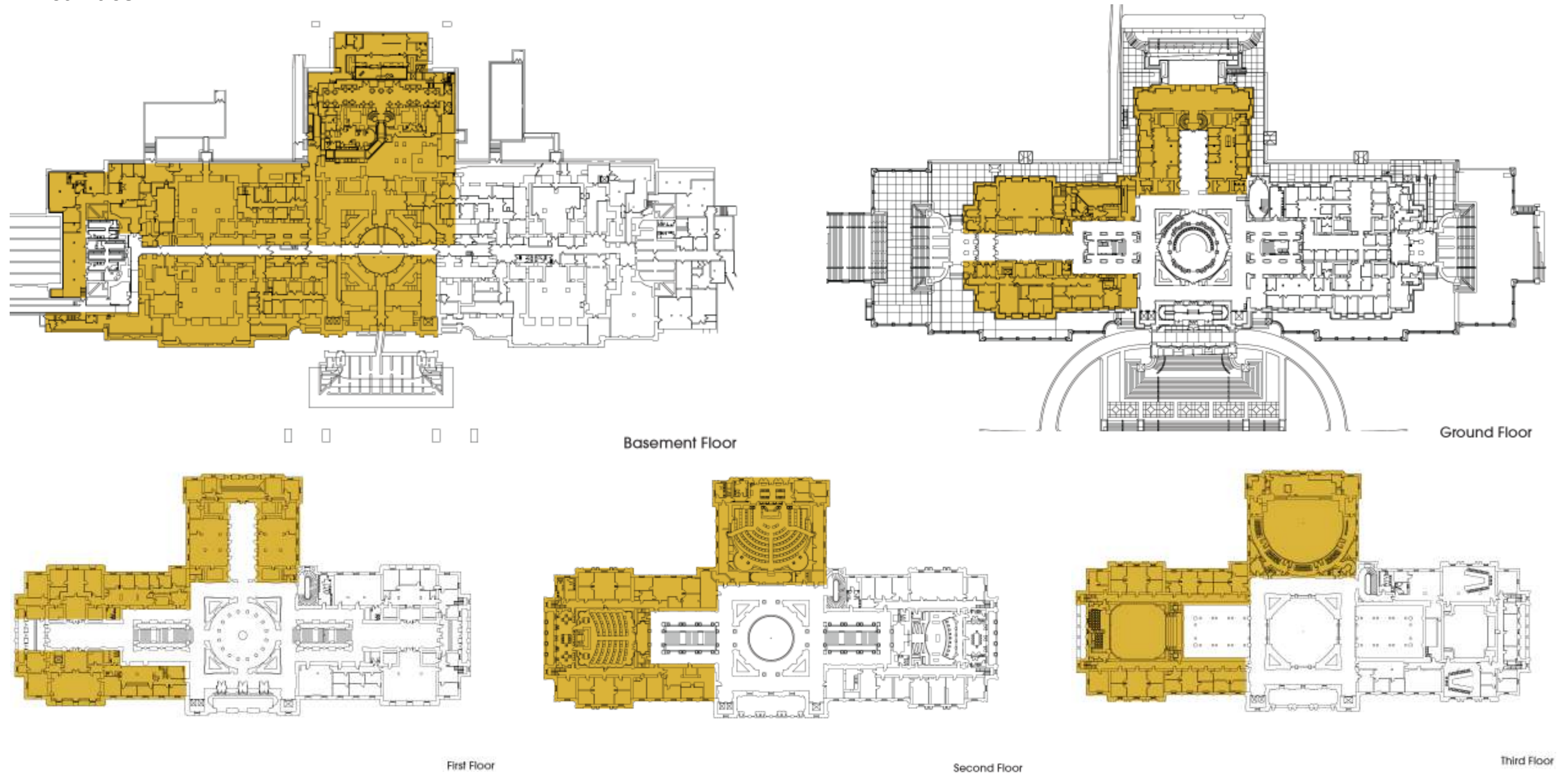
Floors Included:  
Lower Level    Second Floor  
Ground Floor    Third Floor  
First Floor

PRELIMINARY MASTER PLAN

# SECTION FIVE: SEQUENCE “C” NORTH & WEST WING CLOSURE

Activities

Fiscal Years 2013-2015



PRELIMINARY MASTER PLAN

SECTION FIVE:

SEQUENCE “C” NORTH & WEST WING CLOSURE

Fiscal Years 2013-2015

Implementation

2014 Continued

- The CM will need to assure and monitor the abatement work in the Capitol to assure the workers from other trades remain safe.
- Following the abatement and demolition of all interior non historic walls and partitions, as well as the existing mechanical and electrical components, the CM will work through the layout process for the new Mechanical and the Electrical locations.
- The CM, working with the selected Mechanical and Electrical contractors, will install the mechanical, electrical, communication, and other systems in the vertical chases identified in the bid documents.
- The OPM, Stakeholders and the Capitol Preservation Commission shall finalize the space layout or office locations for the occupants of the Capitol following the legislative session in 2014 . This will allow the AEC team to move forward with documentation for the office and associated spaces within the east wing and throughout the Capitol.
- The AEC team will coordinate the release of the tenant finish package with the completion of the mechanical and electrical vertical systems integration into the building.
- The tenant finish package will provide information on both the public meeting locations and the office space.
- Complete exterior stone repairs and window replacement.
- Install mechanical equipment
- Replace flat roof

IV. 2015

- Construction Continues
- It is anticipated at all work will be completed as follows:
- Abatement and Demolition - Jun. 2014
- Vertical MEP Systems installation - Mar. 2015
- Tenant Finish build out complete - Oct. 2016

V. 2016

- Project Complete



# SECTION SIX: SEQUENCE “D” PUBLIC SPACE RESTORATION

Fiscal Years 2012-2016

## Activities

### Public Space Closure and Restoration

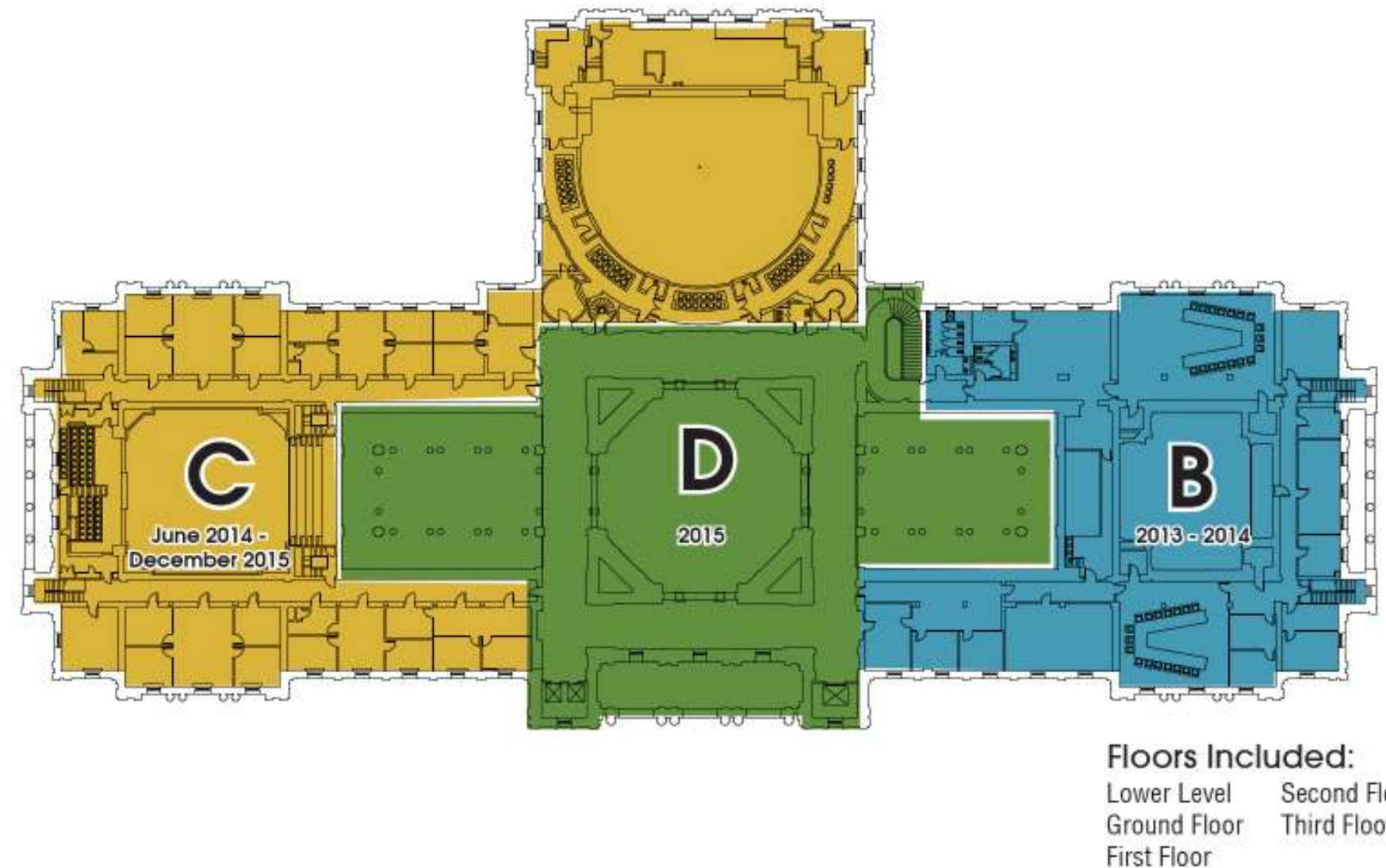
#### I. 2012

- Working with the stakeholders and the Capitol Preservation Commission the AEC team will work with OPM and the Department of Administration to determine the best way to procure the service in a design assist performance contract for:
  - Decorative Paint
  - Marble and Stone Restoration
  - Plaster Ceiling Restoration
  - Bonze Light Fixtures Restoration and Manufacture
  - Historic Hardware Restoration and Manufacture
- Working with the State Historic Preservation Officer (SHPO), State Building Official and the State Fire Marshall the OPM and the AEC team will determine the modifications within the pubic spaces that are acceptable.

#### II. 2013

- Using the Stone Study that the Department of Administration had prepared, the AEC team will issue documents for the Restoration, Repair, and Repointing of the exterior Stone of the Building. These documents will be issued as a separate bid package by the CM in 2014, such that work may begin in early spring following the freezing temperatures.
- The AEC team will prepare the Pubic Space Modification documents which will provide for life safety and other modification to bring the building into conformance with code compliance issues.

The AEC team and the design assist contractor will work together to finalize all public space documents (decorative paint, marble and stone work, plaster work, light fixture restoration, and hardware restoration) and prepare the needed documents to finalize the procurement process in preparation for the beginning of construction in 2014.

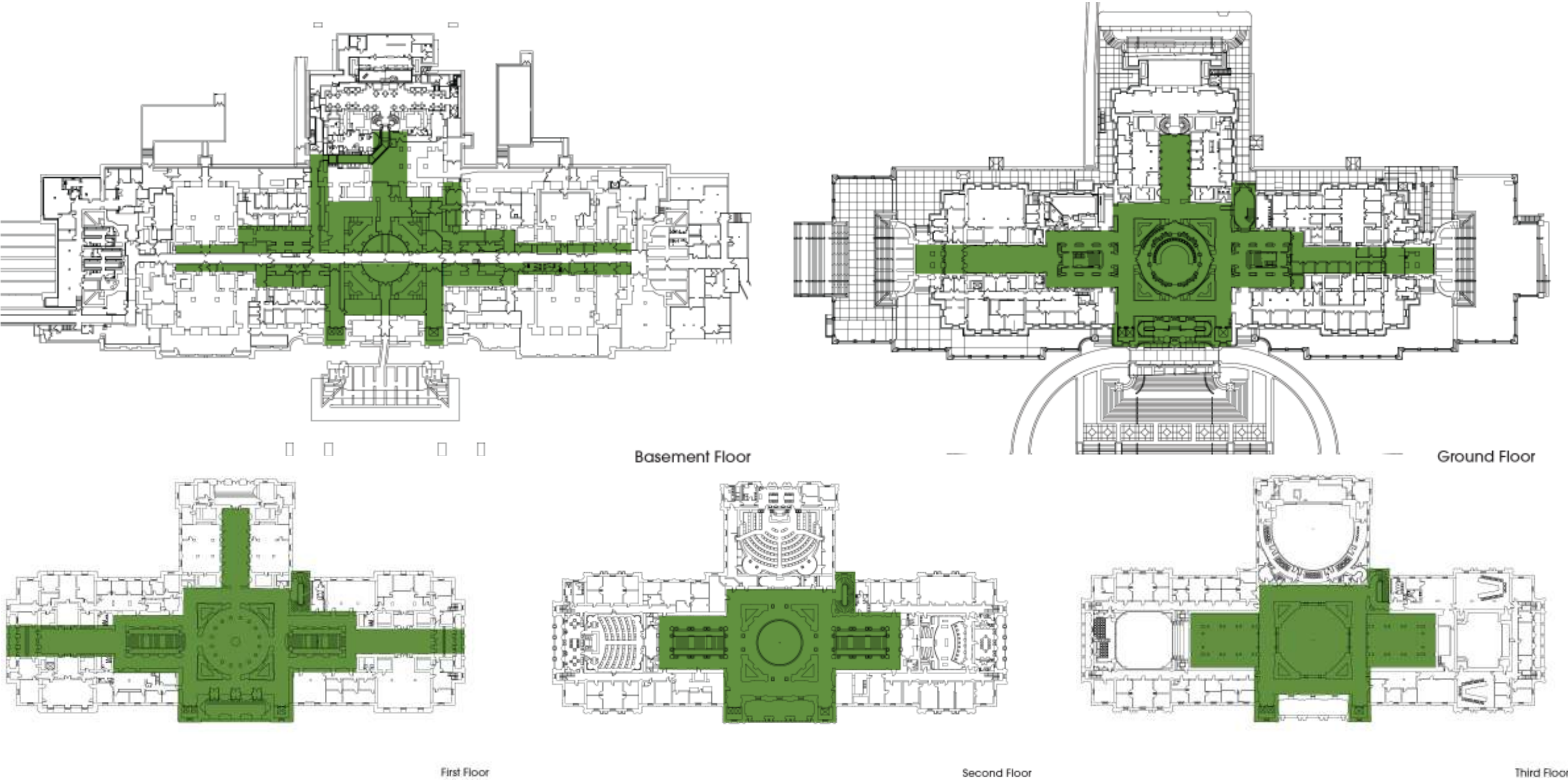


PRELIMINARY MASTER PLAN

**SECTION SIX:  
SEQUENCE “D” PUBLIC SPACE RESTORATION**

Activities

Fiscal Years 2012-2016



PRELIMINARY MASTER PLAN

SECTION SIX:

SEQUENCE “D” PUBLIC SPACE RESTORATION

Fiscal Years 2012-2016

Implementation

Continued

III. 2014

- Immediately following the Legislative Session in 2014, all occupants of the east wing from floors basement to third floor will be relocated to the associated swing or permanent space and the building will be closed.
- Abatement and Demolition of the interior of the Public Spaces will be the first construction activity of this sequence in order to prepare the public spaces for the required life safety and accessible requirements.
- The CM will need to assure and monitor the abatement work in the Capitol to assure the other workers from other trades remain safe.
- Following the abatement and the demolition of all designated interior historic walls, partitions and finishes, as well as the existing mechanical and electrical components the CM will work through the layout process for the new Mechanical and the Electrical locations that are associated with the public spaces.
- The CM working with the selected Mechanical and Electrical contractors will install the mechanical, electrical, communication and other systems in the identified vertical chases that are identified in the bid documents.
- The OPM, and the AEC team working closely with the design assist contractors, will proceed with the implementation of all life safety and accessibility related elements in the pubic areas. This work will be completed in full, prior to any of the decorative finish work being performed.
- Following the installation of the life safety, mechanical and electrical elements, the plaster work will commence. All plaster work will conform to and match the existing in substance and quality. The CM will assure the OPM and the AEC team that all protocols are being followed.

IV. 2015

- Once the OPM and the CM are satisfied that the working conditions are such that the generation of dust is at an acceptable minimal level, the decorative finish work may begin.
- Following the completion of the Plaster work, the order of the decorative work shall be as follows:
  - Interior Marble and Stone repair
  - Decorative Finish painting to restore the original design to all the public areas. The Design assist contractor shall verify and provide documentation as to the historic restoration and tie the work to the bid documents.
- Historic Light fixture installation. The light fixtures shall be ordered as follows:
  - Original and historic light fixtures to be removed with documentation of location. Restored and replaced to extract location.
  - Replicated light fixtures that were once in the capitol shall have their locations identified on the documents and shall be installed in specified locations.
  - New families of Light fixtures, created from the spinning and casting of the original historic light fixtures shall be hung in their designated locations in the new committee room or other new spaces that are with in the pubic way.
- Door and Window hardware shall be replicated to match the existing and shall be installed as needed to complete the restoration.

- It is anticipated that all work will be completed as follows:
- Plaster Work and Ceilings - Jun. 2015
- Decorative Painting in Public Areas - Oct. 2016
- Installation of Light Fixtures - Dec. 2016
- Installation of Hardware - Dec. 2016

V. 2016

- Project Complete



# SECTION SEVEN: SECURITY & GROUNDS

## Activities

Fiscal Years 2015-2016

### General Activities

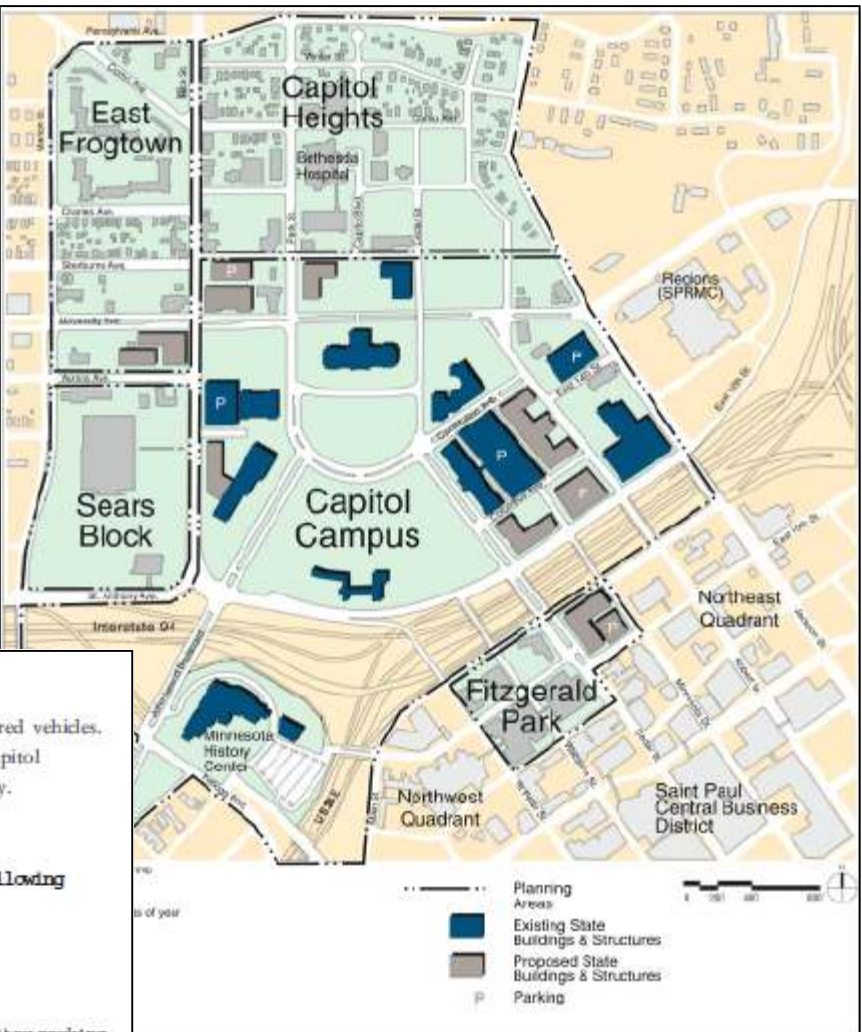
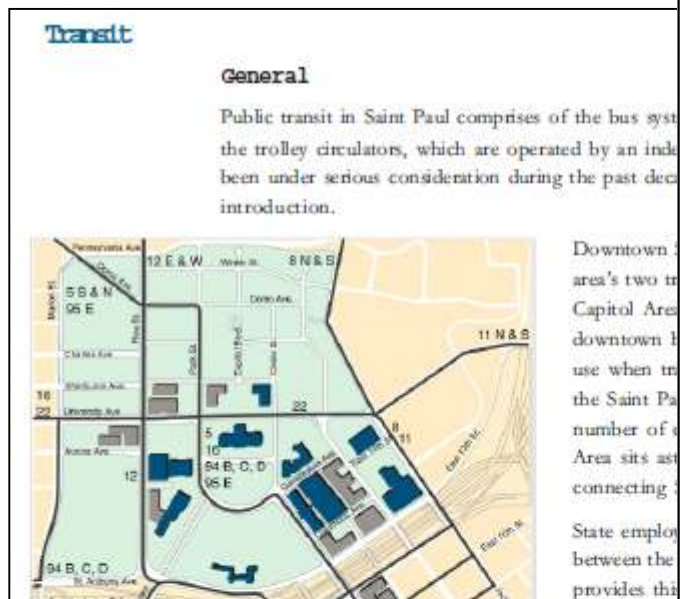
- Reconfigure the grounds surrounding the Capitol to provide for:
  - Improved security by surface parking lots
  - Controlling access by school and tour buses
  - Identifying and controlling access points

### Design Activities

- The AEC team, working with the OPM, the department of Public Safety, and the Capitol Preservation Commission, will identify areas where safety improvements are required.
- The AEC team will provide design information to the Capitol Preservation Commission for direction on the reconfiguration of the parking and drop off areas.
- The AEC team will implement the design work.

### Construction Activities

- The CM shall begin the reconfiguration of the grounds in order to confirm to the desires of the Commission.
- The reconfiguration shall be complete prior to October of 2015.



*This plan strives to diminish the negative influence of surface parking lots on the appearance of the Capitol Area.*

#### Parking Lots

Landscaping can screen and enrich expanses of pavement and stored vehicles. Existing parking areas should be effectively screened from the Capitol Campus and frame views towards it, without compromising safety.

#### Objective:

Make parking lots safe and parked vehicles inconspicuous, following guidelines as generated and documented by the CAAPB.

#### Guidelines:

- Reduce surface parking within the Capitol Campus.
- Promote opportunities for Capitol-related commuter and visitor parking outside the Capitol Campus.
- Ensure that landscaping and lighting create safe parking lot environments during all hours.
- Reduce the demand for parking within the Capitol Area by State and other employees by supporting the Department of Administration's transportation management plan, as recommended by the Strategic Plan.
- Improve transit access to the Capitol Area.
- Reinforce the design of all area parking lots using the CAAPB Parking Area Design Framework (1991) and any amendments.

and frequency of service in  
to meet changing access  
increase transit use.  
transit routes, schedules, and  
B.  
minimize traffic congestion  
route through the Capitol

PRELIMINARY MASTER PLAN

# SECTION EIGHT: FURNITURE AND ART

Fiscal Years 2015-2016

## Activities

The Commission needs to determine how they want to proceed with Art and Furniture within the Capitol

### General Activities

- Furniture
- Art

### Design Activities

- Design of Art Placement
- Design of Furniture Placement

### Monuments and Public Art

**General**

Public art enriches the built environment and can improve our understanding of a place and its meaning in ways that buildings, landscape and infrastructure do not. Monuments belong to a particular category of commemorative public art that convey the values of a community. They tell the story of where a place has been and where it hopes to go. There may be opportunities for public art on the Capitol Campus to be integrated with public art in the Capitol Area neighborhoods.



Public art in Saint Paul has been supported by the civic commitment and private generosity of its citizens. The CAAPB's long-term policy of developing the Capitol Mall as a public park has produced memorials of significant civic importance in the last few years. The continuation of both State and private funding for the implementation and maintenance of public art is critical to future efforts. However, enthusiasm for the installation of commemorative works should be tempered with the primacy of maintaining the dignity of the Capitol Mall.

*Leif Erikson's monument may be appreciated in the context of the Capitol dome and as the park centerpiece.*

ART and Furniture



SECTION NINE:

BUDGET AND SCHEDULE OF THE RESTORATION

Fiscal Years 2012-2016

General

General Construction Costs

The budget has been developed through a series of analysis that include:

- Benchmarking
- Systems Analysis Estimating
- Investigation of Specialty Items
- Quantity Take Off of Specific Items
- Estimating Contingency for unknowns

This information has led to a rough order of magnitude estimate for project cost of \$241,000,000.

The analysis was categorized into the following CSI sections:

- 02 Existing Conditions
- 02 Asbestos Abatement
- 04 Exterior Stone Restoration
- 05 Roofing
- 08 Exterior Window Replacement
- 08 Exterior Door Renovation
- 09 Interior Historical Painting
- 09 Interior Finish
- 09 Interior Finish
- 09 ADA Compliance and Accessibility
- 14 Freight Elevators
- 14 Passenger Elevators
- 21 Fire Protection
- 22 Plumbing
- 23 Mechanical Systems
- 26 Fire Alarms
- 26 Electrical Systems
- 26 Lightning Protection
- 26 Historical Lighting Renovation
- 26 Replica Historical Fixtures
- 27 Telecommunications
- 28 Security
- 31 Underground Excavation

Owner Costs

Owner Cost include all costs above and beyond the cost of the hard construction work. These are sometimes referred to as soft costs.

These costs include professional services such as:

- Owner program manger Fees,
- Architect and Engineering Fees,
- CM Preconstruction Services Fees
- Inspection Services Fees
- Commissioning Authority Fees
- Communication Design Services Fees

Other typical non-profession service items include:

- Contingencies
- General Expenses

However, for the restoration of the Minnesota Capitol, additional owner costs must be accounted for. These include:

- Historic Structures Report which will document the history and activities at the Capitol.
- Art work including both new art and restored works of art belonging to the State
- Relocation and moving costs for the occupants of the Capitol as well as for the displaced occupants of the future swing space.
- Swing Space ready costs
- Swing space for the occupants of the Capitol to use while the building is closed.
- Furniture designed to be sympathetic to the historic nature and design of the Capitol. This is above and beyond the typical furniture budget.

Minnesota State Capitol Restoration Budget Recommendation By MOCA December 31, 2011			
Program Costs			
Construction Costs	\$	126,544,011.74	
Contractor Contingency	\$	10,559,280.94	8.34%
Contractor Fee	\$	4,619,685.41	3.65%
Total Construction Costs	\$	141,722,978.09	
Owner Project Costs			
Project Mangement	\$	1,483,000.00	1.05%
Architects	\$	15,331,000.00	10.82%
Predesign - A/E Package	\$	500,000.00	0.35%
Construction Contingency	\$	14,832,000.00	10.47%
Telecommunications (voice & data)	\$	5,746,000.00	4.05%
Inspections - Special construcion and General	\$	741,000.00	0.52%
Commissioning Energy services	\$	2,000,000.00	1.41%
Security Equipment	\$	1,851,000.00	1.31%
Furniture	\$	7,416,000.00	5.23%
Total Owner Project Costs	\$	49,900,000.00	
Total Project Costs	\$	191,622,978.09	
Inflation at 11.79%	\$	22,592,349.12	11.79%
Total with inflation	\$	214,215,327.21	
Other Project Costs			
Design Guidelines/Master Plan	\$	700,000.00	0.33%
CM PreConstruction	\$	2,225,000.00	1.04%
Relocation moving costs	\$	2,000,000.00	0.93%
Historic Structure Report	\$	741,000.00	0.35%
General Expenses	\$	741,000.00	0.35%
Swing Space	\$	20,000,000.00	
Total Owner Costs	\$	26,407,000.00	
Total Program Costs	\$	240,622,327.21	
Total Estimated Cost	\$	241,000,000.00	

PRELIMINARY MASTER PLAN



SECTION NINE:

BUDGET AND SCHEDULE OF THE RESTORATION

CSI  
Construction  
Estimate

Fiscal Years 2012-2016

Minnesota State Capitol Historic Renovation												
Draft Cost Estimate 12/23/2011									Sequence A	Sequence B	Sequence C	Sequence D
All costs in 2011 dollars									Attic	East	North/West	Public
CSI DIVISION	ITEM	SUBITEM	PERCENT OF PROJECT	UNIT	QUANTITY	UNIT PRICE	COST	NOTES				
02	Existing Conditions			LS	1	\$4,600,000.00	\$4,600,000	Includes demolition and other Division 02 work.	\$ 1,150,000	\$ 1,150,000	\$ 1,150,000	\$ 1,150,000
02	Asbestos Abatement			LS	1	\$1,150,000.00	\$1,150,000	Removal of remaining asbestos in the Capitol	\$ 287,500	\$ 287,500	\$ 287,500	\$ 287,500
03	Concrete Floor Slabs			LS	1	\$7,475,000.00	\$7,475,000	New Slab in the new Mechanical spaces (Attic)	\$ 7,475,000			
04	Exterior Stone Restoration			SF	230,253	\$76.25	\$17,556,791	JE Dunn Estimate for Stone 12_01_06. Design costs have been budgeted with existing funds		\$ 17,556,791		
05	Roofing			SF	65,495	\$92.00	\$6,025,540	Design costs have been budgeted with existing funds		\$ 6,025,540		
08	Exterior Window Replacement			EA	248	\$4,600.00	\$1,140,800	Replace existing aluminum skin windows with historically accurate wooden windows			\$ 1,140,800	
08	Exterior Door Renovation			EA	16	\$4,600.00	\$73,600	Install historical appearance hardware, refinish doors			\$ 73,600	
09	Interior Historical Painting			LS	1	\$17,595,000.00	\$17,595,000	Restore frescos and wall paint throughout the building				\$ 17,595,000
09	Interior Finish	Office Space		NSF	79,201	\$86.25	\$6,831,086	Carpet, ceiling, woodwork, cove base, window treatments, interior door refinishing		\$ 2,049,326	\$ 4,098,651.75	\$ 683,109
09	Interior Finish	Meeting Rooms		NSF	33,620	\$172.50	\$5,799,450	Carpet, ceiling, woodwork, cove base, window treatments, interior door refinishing		\$ 1,739,835	\$ 3,479,670	\$ 579,945
09	ADA Compliance and Accessibility			LS	1	\$1,150,000.00	\$1,150,000	Handrails, guardrails, staircase improvements		\$ 345,000	\$ 690,000	\$ 115,000
14	Freight Elevators			LS	1	\$303,600.00	\$303,600	Restoration of existing freight elevator			\$303,600	
14	Passenger Elevators			LS	1	\$1,472,000.00	\$1,472,000	Restoration of existing passenger elevators			\$1,472,000	
21	Fire Protection			GSF	287,986	\$6.23	\$1,795,017	Includes piping, sprinkler heads, storage tank, controls, pump		\$1,795,017		
22	Plumbing			GSF	287,986	\$9.87	\$2,841,558	Potable water systems, rest rooms, showers, roof drains, waste and vent piping		\$2,841,558		
23	Mechanical Systems			GSF	287,986	\$113.57	\$32,707,722	Heating and cooling systems		\$32,707,722		
26	Fire Alarms			GSF	287,986	\$7.27	\$2,093,082	Includes pull station, detectors, and alarms		\$2,093,082		
26	Electrical Systems			GSF	287,986	\$26.27	\$7,564,240	Panels, wire, outlets, non-historical lighting, emergency lighting, exit lighting		\$7,564,240		
26	Lightning Protection			LS	1	\$287,500.00	\$287,500	Renovate existing system		\$287,500		
26	Historical Lighting Renovation			LS	1	\$3,246,450.00	\$3,246,450	Restore bronze and faux brass fixtures throughout the building				\$3,246,450
26	Replica Historical Fixtures			EA	200	\$23,000.00	\$4,600,000	Historically accurate light fixtures for damaged, missing or replaced light fixtures				\$4,600,000
27	Telecommunications			GSF	287,986	\$12.49	\$3,596,657	Data and voice wiring (CAT5 or equivalent), fire alarm pull stations and control panels, strobes, horns		\$ 2,517,660	\$1,078,997	
28	Security			GSF	287,986	\$6.43	\$1,851,318	Motion detectors, security cameras, card readers, emergency broadcast system, magnetic detectors		\$ 1,295,923	\$555,395	
31	Underground Excavation			LS	1	\$234,600.00	\$234,600	Underground Storage Tank for Fire Protection	\$234,600			
Project Subtotal including 15% total contingency (Construction Contingency 10% + Estimating 5%)									\$ 9,147,100	\$ 80,256,694	\$ 14,330,214	\$ 28,257,004
Constructicon Costs with Contingency & Inflation									\$9,147,100	\$80,256,694	\$14,330,214	\$28,257,004
Contractor General Conditions									\$ 731,768	\$ 6,420,536	\$ 1,146,417	\$ 2,260,560
Contractor Fee									\$ 320,149	\$ 2,808,984	\$ 501,558	\$ 988,995
Total Construction Costs									\$ 10,199,017	\$ 89,486,214	\$ 15,978,189	\$ 31,506,559

PRELIMINARY MASTER PLAN

SECTION NINE:

BUDGET AND SCHEDULE OF THE RESTORATION

Activities

General

The construction has been broken into four sequences which the CM will manage and oversee. Each sequence is designed to advance the restoration of the Capitol in a effective manner over the four year period. They have also been developed in order to allow the Occupants (Executive, Legislative branch of Government) to work in the building for as much time as possible prior to it’s closure. Finally, the sequences have been developed in an organized manner to minimize any demobilization and remobilization of construction trades, which has a direct impact on the cost of the work due to time lost by subcontractors.

Sequence A - Mechanical & Electrical Attic costs

- The first sequence “A” will be focused on the installation of a new structural slab in the attic space above the third floor.
- This sequence will also include retaining professional services for the entire project.
- It is anticipated that while the work for the entire mechanical and electrical systems will not be included in this phase and may not be completely designed at the time of the Mechanical and Electrical subcontractor selection, it is in the best interest of the project to select them for the whole project and not piece meal the system through procurement processes.
- Exterior Envelope: Repair the exterior stone and replacement of windows.

Sequence B - Restoration of East Wing

- The second sequence “B” will be focused on the vertical main runs for both mechanical and electrical services to the project through the west wing only. This sequence will allow the Legislative session to occur in 2014. The building will be closed following the session.
- Installation of the mechanical and electrical equipment and ventilation system.

Fiscal Years 2012-2016

Minnesota State Capitol Restoration Budget Recommendation By MOCA			Sequence 1		Sequence 2		
December 31, 2011			Attic		East		
			Bonding Year 2012				
Program Costs							
Construction Costs	\$	126,544,011.74	\$	10,200,000.00	\$	63,100,000.00	
Contractor Contingency	\$	10,559,280.94	8.34%	\$	851,124.16	\$	5,265,287.69
Contractor Fee	\$	4,619,685.41	3.65%	\$	372,366.82	\$	2,303,563.36
Total Construction Costs	\$	141,722,978.09	\$	11,423,490.98	\$	70,668,851.05	
			\$	11,401,000.00	\$	70,642,000.00	
Owner Project Costs							
Project Mangement	\$	1,483,000.00	1.05%	\$	371,000.00	\$	371,000.00
Architects	\$	15,331,000.00	10.82%	\$	11,998,000.00	\$	-
Predesign - A/E Package	\$	500,000.00	0.35%	\$	500,000.00		
Construction Contingency	\$	14,832,000.00	10.47%	\$	1,070,000.00	\$	7,612,000.00
Telecommunications (voice & data)	\$	5,746,000.00	4.05%			\$	2,517,000.00
Inspections - Special construcion and General	\$	741,000.00	0.52%	\$	185,250.00	\$	185,250.00
Commissioning Energy services	\$	2,000,000.00	1.41%	\$	500,000.00	\$	500,000.00
Security Equipment	\$	1,851,000.00	1.31%			\$	1,295,700.00
Furniture	\$	7,416,000.00	5.23%				
Total Owner Project Costs	\$	49,900,000.00	\$	14,624,250.00	\$	12,480,950.00	
Total Project Costs	\$	191,622,978.09	\$	26,047,740.98	\$	83,149,801.05	
Inflation at 11.79%	\$	22,592,349.12	11.79%	\$	3,071,028.66	\$	9,803,361.54
Total with inflation	\$	214,215,327.21	\$	29,118,769.64	\$	92,953,162.60	
Other Project Costs							
Design Guidelines/Master Plan	\$	700,000.00	0.33%	\$	700,000.00		
CM PreConstruction	\$	2,225,000.00	1.04%	\$	1,230,000.00		
Relocation moving costs	\$	2,000,000.00	0.93%			\$	1,000,000.00
Historic Structure Report	\$	741,000.00	0.35%	\$	741,000.00		
General Expenses	\$	741,000.00	0.35%	\$	67,000.00		
Swing Space	\$	20,000,000.00		\$	8,000,000.00	\$	12,000,000.00
Total Owner Costs	\$	26,407,000.00	\$	10,738,000.00	\$	13,000,000.00	
Total Program Costs	\$	240,622,327.21	\$	39,856,769.64	\$	105,953,162.60	
Total Estimated Cost	\$	241,000,000.00	\$	40,000,000.00	\$	106,000,000.00	
Bond Request					\$	146,000,000.00	

PRELIMINARY MASTER PLAN

## BUDGET AND SCHEDULE OF THE RESTORATION

## Fiscal Years 2012-2016



SECTION NINE:

BUDGET AND SCHEDULE OF THE RESTORATION

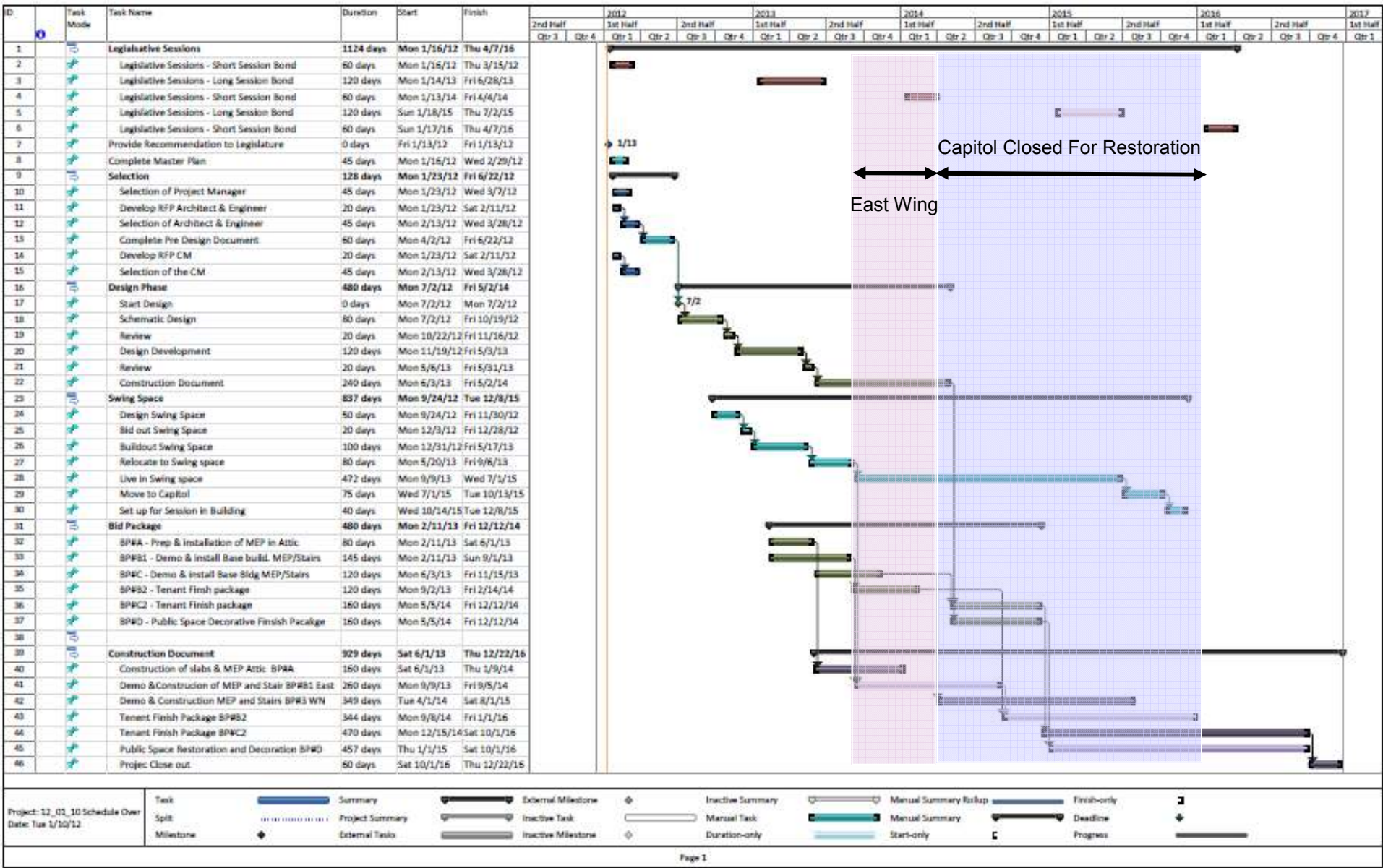
Activities

Fiscal Years 2012-2016

General

Schedule

- The schedule for the restoration of the Minnesota Capitol has been developed around the understanding that the procurement process will be built around a CM @ Risk or CMr process. This process will allow for multiple bid packages. Currently, there are six bid packages contemplated for the basic activities of the project. More may be desired as the work progresses.
- The schedule has also been designed to allow the CM to manager the flow of the work to minimize any down time associated with the sequences of work.
- It has been developed to keep the building open in sequence A and partially open during sequence B. The Capitol will be closed to the public following the legislative session of 2014 for less than two years.



# SECTION TEN: MAINTENANCE AND STEWARDSHIP PLANNING

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## Activities

Fiscal Years 2016-2035

Following the Restoration of the Capitol, it will be imperative that the Capitol be maintained in a fashion that is consistent with each of the critical materials. This section is focused on providing guidance to that process.

### General Activities

- Identify the maintenance responsibilities beginning in 2016

### Operations, Conservation and Maintenance

- Implement maintenance activity - 2016
- Identify maintenance Program

SECTION TEN:

MAINTENANCE AND STEWARDSHIP PLANNING

Stewardship Plan

Fiscal Years 2016-2035

With the completion of this restoration of the Capitol, the Commissions primary focus will be to function as a Steward for the Capitol. This activity will focus upon the operational aspects, conservation need and maintenance responsibilities of physical plant as well as art and landscaping.

Operational

Conservation

Maintenance